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Report Re:

THE FINANCING OF  
TRANS WORLD AIRLINES, INC.  
During the 1955 - 1960 Period  
May 2, 1966

PARTS I and II

DREXEL HARRIMAN RIPLEY  
INCORPORATED

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

Report Re:

THE FINANCING OF  
TRANS WORLD AIRLINES, INC.  
During the 1955 - 1960 Period  
May 2, 1966

PARTS I and II

DREXEL HARRIMAN RIPLEY  
INCORPORATED

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

PART I - QUALIFICATIONS

PART I

QUALIFICATIONS

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

**DREXEL HARRIMAN RIPLEY**  
INCORPORATED

60 BROAD STREET

NEW YORK, NEW YORK 10004

TELEPHONE: 787-7300

November 18, 1966

Memorandum for  
Mr. Dudley B. Tenney  
Cahill, Gordon, Reindel & Ohl

Re: Report of Drexel Harriman Ripley, Inc.  
(TWA Ex. 5-A)

We have furnished you with copies of pages 37 and 38 of our TWA Report, revised to correct certain erroneous data which appeared in our Report as filed. Set forth below are certain other changes which should be made in the Report to correct typographical errors and mistakes of transcription which we have discovered.

Part II - page 7

Third paragraph under Boeing:

First line should read "From then on (meaning with the 1956 .....)" (not 1957)

Part II - page 54

Note to table at top of page:

Last line should read "..... (See Exhibit: Trans World-2.)" (not Trans World-28)

Table at bottom of page:

Footnote (\*) should read "See Exhibit: Trans World-10." (not Trans World-29)

Part II - page 72

Chapter XXXIII:

The dollar figure in the sixth line of the first paragraph should read "\$34.3" (not \$33.7)

Part III - Volume 1 - Exhibit: General - 10:

Table - Fifth line under Date should read "August 1948".  
(not June)



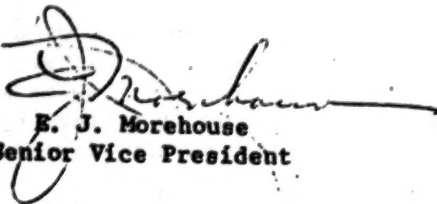
TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

Memorandum for Mr. Dudley B. Tenney  
Page 2

November 18, 1966

Part III - Volume 2 - Exhibit: Financials - 17

The dollar figure appearing under 1961 Year Total on the line entitled "Limitation on Additional Funded Debt", i.e., the last figure in the table, should read "\$103.4". (not \$130.4)

  
E. J. Morehouse  
Senior Vice President

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

**DREXEL HARRIMAN RIPLEY**

INCORPORATED

60 BROAD STREET

NEW YORK, NEW YORK 10004

TELEPHONE: 767-7300

May 2, 1966

Messrs. Cahill, Gordon, Reindel & Ohl  
80 Pine Street  
New York, New York 10005

Dear Sirs:

This is written in response to your request that we submit information in regard to the activities of Harriman Ripley & Co., Incorporated in the investment banking business pertaining to the issue of corporate securities. The undersigned Drexel Harriman Ripley, Incorporated is the successor, as of February 1, 1966, to Harriman Ripley & Co., Incorporated.

On Exhibit A herewith we submit tabulations which give in summary form figures indicating the volume of the underwriting and private placement activities of Harriman Ripley & Co., Incorporated. Shown separately are the figures for such financing activities with respect to air transport and aviation manufacturing.

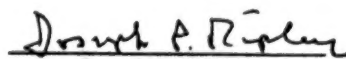
The following is a brief extract from the description of Harriman Ripley & Co. appearing on page 102 of the Corrected Opinion of Federal Judge Harold Medina in U.S.A. vs. H. S. Morgan et al.

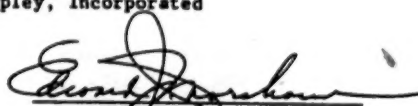
"Harriman Ripley is not only a leading managing underwriter, but it is, in addition, an important distributing organization. It was at the beginning, and has continued to be, a large investment banking house, with a well staffed and aggressive buying, selling and distributing organization."

On Exhibit B herewith we submit information as to each individual who has signed this report on behalf of Drexel Harriman Ripley, Incorporated.

Yours truly,

Drexel Harriman Ripley, Incorporated  
by

  
Joseph P. Ripley  
Honorary Chairman

  
Edward J. Morehouse  
Senior Vice President

TWA Ex. 5(a), Exhibit A  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

RECORD OF HARRIMAN RIPLEY & CO., INC.

in

THE UNDERWRITING OF NEGOTIATED PUBLIC OFFERINGS  
AND THE MAKING OF PRIVATE PLACEMENTS  
OF SECURITIES OF U. S. AND FOREIGN CORPORATIONS

For the Period: June 14, 1934 to December 31, 1965

AVIATION			
Air Transport			
	Amount	HRCo Parti- cipation	Number of Issues
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	73,401	8,018	6
Managed by others	<u>463,454</u>	<u>11,909</u>	<u>14</u>
Total	536,855	19,927	20
Private Placements:			
Managed or co-managed by HRCo.	162,000	162,000	4
Managed by others	-	-	-
Total	<u>162,000</u>	<u>162,000</u>	<u>4</u>
Total - Public and Private	<u>698,855</u>	<u>181,927</u>	<u>24</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo.	235,401	170,018	10
Managed by others	<u>463,454</u>	<u>11,909</u>	<u>14</u>
Grand Total	<u>698,855</u>	<u>181,927</u>	<u>24</u>

AVIATION			
Manufacturing			
	Amount	HRCo Parti- cipation	Number of Issues
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	226,353	29,380	11
Managed by others	<u>324,456</u>	<u>8,755</u>	<u>14</u>
Total	550,809	38,135	25
Private Placements:			
Managed or co-managed by HRCo.	125,000	125,000	2
Managed by others	-	-	-
Total	<u>125,000</u>	<u>125,000</u>	<u>2</u>
Total - Public and Private	<u>675,809</u>	<u>163,135</u>	<u>27</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo.	351,353	154,380	13
Managed by others	<u>324,456</u>	<u>8,755</u>	<u>14</u>
Grand Total	<u>675,809</u>	<u>163,135</u>	<u>27</u>

AVIATION			
Total Aviation			
	Amount	HRCo Parti- cipation	Number of Issues
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	299,754	37,398	17
Managed by others	<u>787,910</u>	<u>20,664</u>	<u>28</u>
Total	1,087,664	58,062	45
Private Placements:			
Managed or co-managed by HRCo	287,000	287,000	6
Managed by others	-	-	-
Total	<u>287,000</u>	<u>287,000</u>	<u>6</u>
Total - Public and Private	<u>1,374,664</u>	<u>345,062</u>	<u>51</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo	586,754	324,398	23
Managed by others	<u>787,910</u>	<u>20,664</u>	<u>28</u>
Grand Total	<u>1,374,664</u>	<u>345,062</u>	<u>51</u>

TWA Ex. 5(a), Exhibit A  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

RECORD OF HARRIMAN RIPLEY & CO., INC.

in

THE UNDERWRITING OF NEGOTIATED PUBLIC OFFERINGS  
AND THE MAKING OF PRIVATE PLACEMENTS  
OF SECURITIES OF U. S. AND FOREIGN CORPORATIONS

For the Period: June 16, 1934 to December 31, 1965

	<u>AVIATION</u>		
	<u>Air Transport</u>		
	<u>Amount</u>	<u>HRCo Parti- cipation</u>	<u>Number of Issues</u>
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	116,286	12,585	7
Managed by others	<u>463,454</u>	<u>11,909</u>	<u>14</u>
Total	579,740	24,494	21
Private Placements:			
Managed or co-managed by HRCo.	162,000	162,000	4
Managed by others	-	-	-
Total	<u>162,000</u>	<u>162,000</u>	<u>4</u>
Total - Public and Private	<u>741,740</u>	<u>186,494</u>	<u>25</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo.	278,286	174,585	11
Managed by others	<u>463,454</u>	<u>11,909</u>	<u>14</u>
Grand Total:	<u>741,740</u>	<u>186,494</u>	<u>25</u>

	<u>AVIATION</u>		
	<u>Manufacturing</u>		
	<u>Amount</u>	<u>HRCo Parti- cipation</u>	<u>Number of Issues</u>
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	183,468	24,813	10
Managed by others	<u>324,456</u>	<u>8,755</u>	<u>14</u>
Total	507,924	33,568	24
Private Placements:			
Managed or co-managed by HRCo.	125,000	125,000	2
Managed by others	-	-	-
Total	<u>125,000</u>	<u>125,000</u>	<u>2</u>
Total - Public and Private	<u>632,924</u>	<u>158,568</u>	<u>26</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo.	308,468	149,813	12
Managed by others	<u>324,456</u>	<u>8,755</u>	<u>14</u>
Grand Total	<u>632,924</u>	<u>158,568</u>	<u>26</u>

	<u>AVIATION</u>		
	<u>Total Aviation</u>		
	<u>Amount</u>	<u>HRCo Parti- cipation</u>	<u>Number of Issues</u>
	-----	\$000 omitted	-----
Public Offerings:			
Managed or co-managed by HRCo.	299,754	37,398	17
Managed by others	<u>787,910</u>	<u>20,664</u>	<u>28</u>
Total	1,087,664	58,062	45
Private Placements:			
Managed or co-managed by HRCo	287,000	287,000	6
Managed by others	-	-	-
Total	<u>287,000</u>	<u>287,000</u>	<u>6</u>
Total - Public and Private	<u>1,374,664</u>	<u>345,062</u>	<u>51</u>
Public Offerings and Private Placements:			
Managed or co-managed by HRCo	586,754	324,398	23
Managed by others	<u>787,910</u>	<u>20,664</u>	<u>28</u>
Grand Total	<u>1,374,664</u>	<u>345,062</u>	<u>51</u>

TWA Ex. 5(a), Exhibit A  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

**RECORD OF HARRIMAN RIPLEY & CO., INC.**  
in  
**THE UNDERWRITING OF NEGOTIATED PUBLIC OFFERINGS  
AND THE MAKING OF PRIVATE PLACEMENTS  
OF SECURITIES OF U. S. AND FOREIGN CORPORATIONS**

**For the Period: June 16, 1934 to December 31, 1965**

	<b>OTHER CORPORATE</b>		
	<u>Amount</u>	<u>HRCo Parti- cipation</u>	<u>Number of Issues</u>
	----- \$000 omitted -----		
<b>Public Offerings:</b>			
Managed or co-managed by HRCo	2,648,091	366,901	179
Managed by others	<u>53,858,250</u>	<u>1,850,933</u>	<u>1,791</u>
<b>Total</b>	<b>56,506,341</b>	<b>2,217,834</b>	<b>1,970</b>
<b>Private Placements:</b>			
Managed or co-managed by HRCo	610,660	372,946	69
Managed by others	<u>86,116</u>	<u>4,878</u>	<u>7</u>
<b>Total</b>	<b>696,776</b>	<b>377,824</b>	<b>76</b>
<b>Total - Public and Private</b>	<b><u>57,203,117</u></b>	<b><u>2,595,658</u></b>	<b><u>2,046</u></b>
<b>Public Offerings and Private Placements:</b>			
Managed or co-managed by HRCo	3,258,751	739,847	248
Managed by others	<u>53,944,366</u>	<u>1,855,811</u>	<u>1,798</u>
<b>Grand Total</b>	<b><u>57,203,117</u></b>	<b><u>2,595,658</u></b>	<b><u>2,046</u></b>

	<b>TOTAL - AVIATION AND OTHER CORPORATE</b>		
	<u>Amount</u>	<u>HRCo Parti- cipation</u>	<u>Number of Issues</u>
	----- \$000 omitted -----		
<b>Public Offerings:</b>			
Managed or co-managed by HRCo	2,947,845	404,299	196
Managed by others	<u>54,646,160</u>	<u>1,871,597</u>	<u>1,819</u>
<b>Total</b>	<b>57,594,005</b>	<b>2,275,896</b>	<b>2,015</b>
<b>Private Placements:</b>			
Managed or co-managed by HRCo	897,660	659,946	75
Managed by others	<u>86,116</u>	<u>4,878</u>	<u>7</u>
<b>Total</b>	<b>983,776</b>	<b>664,824</b>	<b>82</b>
<b>Total - Public and Private</b>	<b><u>58,577,781</u></b>	<b><u>2,940,720</u></b>	<b><u>2,097</u></b>
<b>Public Offerings and Private Placements:</b>			
Managed or co-managed by HRCo	3,845,505	1,064,245	271
Managed by others	<u>54,732,276</u>	<u>1,876,475</u>	<u>1,826</u>
<b>Grand Total</b>	<b><u>58,577,781</u></b>	<b><u>2,940,720</u></b>	<b><u>2,097</u></b>

**Note:** The dollar amounts set forth in this Exhibit represent the principal amounts of fixed interest-bearing securities, the par amounts of preferred stocks and the aggregate public offering prices of common stock issues.

TWA Ex. 5(a), Exhibit B-1  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

QUALIFICATIONS

of

JOSEPH P. RIPLEY

Age: 77

Education: Graduate of Cornell University. Degree: Mechanical Engineer.

Experience in Investment Banking:

April 1922 - April 1925: With W. A. Harriman & Co. as staff member in the Buying Department.

April 1925 - June 1934: With The National City Company, successively as staff member in the Buying Department, Assistant Vice President, Vice President and Executive Vice President.

June 1934 - January 1966: Successively as President, Chairman, and Chairman of the Board of Directors of Harriman Ripley & Co., known as Brown Harriman & Co. from June 1934 to January 1939.

February 1, 1966 to date: Honorary Chairman of Drexel Harriman Ripley, Incorporated.

Experience in the Aviation Industry:

October 1928 - January 1929: Director of Boeing Airplane & Transport Corporation.

January 1929 - August 1934: Director of United Aircraft & Transport Corporation.

April 1934 - October 1937: Member of Reorganization Committee of United Aircraft & Transport Corporation.

July 1934 - November 1943: Voting Trustee of United Air Lines Transport Corporation (now known as United Air Lines).

August 1934 - November 1943: Director of United Air Lines Transport Corporation (now known as United Air Lines).

March 1939: Wrote report, dated March 4, 1939, regarding the Rate of Investment Return as influencing the Determination of Mail Rates on the San Francisco-Hong Kong Line of Pan American Airways; and testified in regard thereto before the Civil Aeronautics Authority.

April 1944 - February 1961: Director of United Aircraft Corporation.

Membership in an Aviation Society:

Founder Member of the Institute of Aeronautical Sciences, December 1932 - October 1938. Member of the same society (later the Institute of the Aerospace Sciences, and now the American Institute of Aeronautics and Astronautics, Inc.) July 1943 to date.

Experience in Underwriting  
and Private Placement of  
Aviation Securities Issues:

The following tabulation is a list of the aviation industry



TWA Ex. 5(a), Exhibit B-1  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

securities issues in respect of the underwriting or private placement of which Joseph P. Ripley acted as the senior officer in charge of the operation for The National City Company or Harriman Ripley & Co., as indicated in the tabulation. The following abbreviations have the respective meanings indicated.

"Amount" means the approximate amount of the issue as measured by the principal amount of fixed interest-bearing securities, the par amount of preferred or preference stock issues, and the aggregate public offering price of common stock issues.

"N.C.Co." means The National City Company which was the securities affiliate of The National City Bank of New York, now known as First National City Bank.

"HRCO" means Harriman Ripley & Co., known as Brown Harriman & Co. from June 1934 to January 1939.

"P.O." means an underwritten public offering, managed solely by N.C.Co. or HRCO, with one exception indicated as a joint managership.

"P.P." means a private placement in which HRCO acted as the sole agent of the issuer.

<u>Name of Issuer and Issue</u>	<u>Date of Issue</u>	<u>Amount</u>	<u>Managed by</u>	<u>Type</u>
<u>Combined Manufacturing and Transport</u>				
Boeing Airplane & Transport Corp. Units consisting of Preferred and Common Stock	October 1928	\$ 5,310,000	N.C.Co.	P.O.
United Aircraft & Transport Corp. Units consisting of Preferred and Common Stock	February 1929	<u>15,000,000</u>	N.C.Co.	P.O.
Total		<u>\$ 20,310,000</u>		

<u>Manufacturing - Solely</u>				
United Aircraft Corpora- tion Common Stock	October 1936	\$ 3,837,000	HRCO	P.O.
Boeing Airplane Company Common Stock	June 1937	3,988,000	HRCO	P.O.
United Aircraft Corpora- tion Common Stock	March 1939	6,263,000	HRCO	P.O.
United Aircraft Corpora- tion Convertible Preference Stock	October 1955	24,347,000	HRCO	P.O.
United Aircraft Corpora- tion Convertible Preference Stock	September 1956	31,810,000	HRCO	P.O.

TWA Ex. 5(a), Exhibit B-1  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

<u>Name of Issuer and Issue</u>	<u>Date of Issue</u>	<u>Amount</u>	<u>Managed by</u>	<u>Type</u>
<u>Manufacturing - Solely (cont'd.)</u>				
Chance Vought Aircraft Convertible Subordi- nated Debentures	June 1957	\$ 12,500,000	HRCo	P.O.
Boeing Airplane Company Senior Debentures	July 1958	40,000,000	HRCo(*)	P.O.
Boeing Airplane Company Convertible Subordi- nated Debentures	July 1958	<u>30,598,000</u>	HRCo(*)	P.O.
Total		<u>\$ 153,343,000</u>		

(\*) Jointly with Blyth & Co., Inc.

<u>Air Transport - Solely</u>				
United Air Lines Transport Corporation Common Stock	October 1936	\$ 3,840,000	HRCo	P.O.
United Air Lines Convertible Preferred Stock	December 1943	10,503,000	HRCo	P.O.
United Air Lines Convertible Preferred Stock	February 1947	9,477,000	HRCo	P.O.
United Air Lines Debentures, Series A	February 1947	12,000,000	HRCo	P.P.
United Air Lines Common Stock	August 1948	2,000,000	HRCo	P.O.
United Air Lines Debentures, Series B	February 1952	10,000,000	HRCo	P.P.
United Air Lines Convertible Preferred Stock	March 1952	22,386,000	HRCo	P.O.
United Air Lines Debentures, Series C	September 1954	20,000,000	HRCo'	P.P.
United Air Lines Debentures, Series D	December 1955	120,000,000	HRCo	P.P.
United Air Lines Subordinated Con- vertible Debentures	November 1960	<u>25,000,000</u>	HRCo	P.O.
Total		<u>\$ 235,206,000</u>		

S u m m a r y

Combined Manufacturing and Transport	\$ 20,310,000
Manufacturing - Solely	153,343,000
Transport - Solely	<u>235,206,000</u>
Total	<u>\$ 408,859,000</u>

TWA Ex. 5(a), Exhibit B-2  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)<sup>2</sup>

QUALIFICATIONS

of

EDWARD J. MOREHOUSE

Age: 45.

Education: Graduate of University of California (1941). Degree:  
B.S. (Business Administration).

Experience in Investment Banking:

July 1946 - January 1966. Successively as staff member in the Buying Department, Assistant Vice President, Vice President and Senior Vice President of Harriman Ripley & Co. A director from 1961 to January 1966.

February 1, 1966 to date: Senior Vice President and a director of Drexel Harriman Ripley, Incorporated.

Memberships: Aerospace Analysts Society 1958 - 1963  
Aviation Securities Committee, 1960 - 1962  
(Investment Bankers Association) (Chairman 1961)

Experience in Underwriting and Private  
Placement of Aviation Securities Issues:

The following tabulation is a list of the aviation industry securities issues in respect of the underwriting or private placement of which Edward J. Morehouse actively participated as a member of the Buying Department of Harriman Ripley & Co. The following abbreviations have the respective meanings indicated.

"Amount" means the approximate amount of the issue as measured by the principal amount of fixed interest-bearing securities, the par amount of preferred or preference stock issues, and the aggregate public offering price of common stock issues.

"P.O." means an underwritten public offering managed solely by Harriman Ripley & Co., with one exception indicated as a joint managership.

"P.P." means a private placement in which Harriman Ripley & Co. acted as the sole agent of the issuer.

<u>Name of Issuer and Issue</u>	<u>Date of Issue</u>	<u>Amount</u>	<u>Type</u>
<u>Manufacturing</u>			
United Aircraft Corporation Convertible Preference Stock	October 1955	\$ 24,347,000	P.O.
United Aircraft Corporation Convertible Preference Stock	September 1956	31,810,000	P.O.
Chance Vought Aircraft Convertible Subordinated Debentures	June 1957	12,500,000	P.O.

TWA Ex. 5(a), Exhibit B-2  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

<u>Name of Issuer and Issue</u>	<u>Date of Issue</u>	<u>Amount</u>	<u>Type</u>
<u>Manufacturing (cont'd.)</u>			
Boeing Airplane Company Senior Debentures	July 1958	\$ 40,000,000(*)	P.O.
Boeing Airplane Company Convertible Subordi- nated Debentures	July 1958	30,598,000(*)	P.O.
United Aircraft Corpora- tion Sinking Fund Notes	June 1961	75,000,000	P.P.
The Boeing Company Notes	May 1963	50,000,000	P.P.
United Aircraft Corpora- tion Convertible Subordinated Debentures	August 1963	<u>42,885,000</u>	P.O.
Total		<u>\$ 307,140,000</u>	

(\*) Jointly managed with Blyth & Co., Inc.

<u>Air Transport</u>			
United Air Lines Common Stock	August 1948	\$ 2,000,000	P.O.
United Air Lines Debentures, Series B	February 1952	10,000,000	P.P.
United Air Lines Convertible Preferred Stock	March 1952	22,386,000	P.O.
United Air Lines Debentures, Series C	September 1954	20,000,000	P.P.
United Air Lines Debentures, Series D	December 1955	120,000,000	P.P.
United Air Lines Subordinated Con- vertible Debentures	November 1960	<u>25,000,000</u>	P.O.
Total		<u>\$ 199,386,000</u>	

<u>S u m m a r y</u>	
Manufacturing	\$ 307,140,000
Transport	<u>199,386,000</u>
Total	<u>\$ 506,526,000</u>

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

PART II

Report re:

THE FINANCING OF  
TRANS WORLD AIRLINES, INC.  
During the 1955-1960 Period

May 2, 1966

PART II - REPORT

TWA Ex. 5(a)  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

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Lists of the EXHIBITS are contained  
in PART III, Volumes 1 and 2.

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(Drexel Harriman Ripley, Inc. Report - Parts I & II)

QUESTION POSED AND SUMMARY OF CONCLUSIONS

This report is written in response to the request of Cahill, Gordon, Reindel & Ohl that we give our opinion as to whether Trans World Airlines, Inc., if it had been under an independent and competent management not influenced by any consideration other than the prudent conduct of its operating and financial affairs, during the 1955-1960 period, could have financed its projected capital requirements for those years, including specifically the purchase of 15 Boeing 707-131s, 18 Boeing 707-331s, 30 Convair 880s, and all the piston aircraft which were purchased by it and delivered during the foregoing period; and, if so, that we describe the methods by which, in our opinion, such capital requirements should have been financed.

We have been advised, and assume for purposes of this report, that if Trans World Airlines had been adequately financed the 33 Boeing aircraft could and would have been ordered by an independent and competent management in the fall of 1955 for delivery in 1959 and 1960, and that the 30 Convair aircraft could and would have been ordered by such management in 1956 for delivery in 1960.

In our opinion Trans World Airlines could have financed, and if we had been advising it during the 1955-1960 period we would have advised it to finance, the acquisition of the foregoing aircraft and its other capital expenditures by means of the following program, which will be more fully described hereinafter, in addition to the estimated internally generated funds.

- (A) Underwritten common stock issue offered preemptively on a share for share basis at \$17.50 per share in May 1955 to provide net proceeds of \$55.5 million. Application of Proceeds: (1) to redeem, on July 1, 1955, at 103-3/4 and interest, \$35.0 million principal amount of 3-3/4% Equipment Mortgage Bonds; (2) to reimburse Hughes Tool Co. on June 1, 1955 for its down payment of \$16.8 million on, and transfer to Trans World Airlines of, its contract with Lockheed for 25 L1649A aircraft, plus interest at 3%; and (3) deposit with Lockheed of \$2.4 million for 5 L1049G aircraft.
- (B) Private placement loan commitment with institutional investors in October 1955 on the following basis:



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Amount: \$150 million minimum.  
\$170 million maximum.

Designation: Flight Equipment Mortgage Notes,  
Series A.

Interest Rate: 4% per annum.

Commitment Fee: 1/2% per annum on the unused portion.

Maturity: October 1, 1980.

Price: 100% plus accrued interest.

Period of Availability: To and including April 1, 1959.

Application of Proceeds: All into a Flight Equipment Fund with the Trustee under the Flight Equipment Mortgage to be used for purchase of flight equipment including spare parts.

- (C) Underwritten nonpreemptive offering of \$60.0 million 5% convertible subordinated debentures at par flat in May 1959. Proceeds to be added to working capital.
- (D) Private placement loan commitment with institutional investors in May 1959 on the following basis:

Amount: \$ 90 million minimum.  
\$110 million maximum.

Designation: Flight Equipment Mortgage Notes,  
Series B.

Interest Rate: 6% per annum.

Commitment Fee: 1/2% per annum on the unused portion.

Maturity: July 1, 1984.

Price: 100% plus accrued interest.

Period of Availability: To and including December 31, 1960.

Application of Proceeds: All into a Flight Equipment Fund with the Trustee under the Flight Equipment Mortgage to be used for purchase of flight equipment including spare parts.

We have designed the foregoing financing program on the basis of projected and reconstructed capital expenditures prepared by Price Waterhouse & Co.; on the basis of reconstructed financial statements prepared by Price Waterhouse & Co.; and on the basis of forecasts of funds generated prepared by Coverdale & Colpitts. And we have used various statements of figures furnished to us by Trans World Airlines pertaining to historical balance sheets, income accounts, and certain other historical financial data.

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### I. Approach to the Problem

We are assuming for the purposes of this report that we were engaged by Trans World Airlines as its investment bankers throughout the 1955-1960 period, and that we were thus in intimate and frequent contact with the management and had access to all current information and data having a bearing on finance.

We approach the problem by making comparisons of the capital structure and financial status of Trans World Airlines and its three main competitors as of the early part of 1955. We select Pan American World Airways, American Airlines and United Air Lines as the competitors with which to make the comparisons. During the period under review, Trans World Airlines was in direct competition with Pan American World Airways in transatlantic operations and with both American Airlines and United Air Lines in domestic operations. (\*)

### II. Abbreviations

For convenience, the following abbreviations are used in this report and on the exhibits hereto.

TWA:	Trans World Airlines, Inc., and, prior to May 1950, Transcontinental & Western Air, Inc.
PAA and Pan American:	Pan American World Airways, Inc., and, prior to January 1950, its corporate predecessor, Pan American Airways, Inc.
AAL and American:	American Airlines, Inc.
UAL and United:	United Air Lines, Inc., and, prior to December 1943, its corporate predecessor, United Air Lines Transport Corporation.
HTCo:	Hughes Tool Company.
HRCO:	Harriman Ripley & Co., Inc. and its successor, Drexel Harriman Ripley, Incorporated.
C&C:	Coverdale & Colpitts.
PWCo:	Price Waterhouse & Co.
RDS:	R. Dixon Speas Associates.

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(\*) On some of the exhibits accompanying this report we submit comparisons with other airlines, such as Eastern Airlines, Delta, etc.

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Debs.: Debentures.

Sen.: Senior.

Sub.: Subordinated.

Conv.: Convertible.

Equity: The sum of capital represented by preferred stock, common stock and surplus.

SPW: Stock Purchase Warrant.

ADMV: The Aggregate Indicated Market Value of equity derived by multiplying the market price of the common stock per share by the number of such shares outstanding, and adding the aggregate par value, if any, of the outstanding straight preferred stock and the aggregate market value of any outstanding convertible preferred stock which is selling over its par value.

NYSE. New York Stock Exchange.

### III. Fundamental Principles of Airline Finance

The financial history of the airlines is characterized by wide variations in profits and by ever-increasing amounts of capital required. This situation has been brought about by the very rapid development of the aviation art, to which World War II and the subsequent defense program have greatly contributed.

We have consistently maintained that the fundamental principles which should be followed in airline finance, throughout the 1955-1960 period under review, are as follows.

The airline should get, or endeavor to get, its equity or junior capital prior to or simultaneously with getting its senior borrowed capital.

The airline should own its own equipment rather than lease it from other parties. However, there are exceptions to this principle. One is the seasonal interchange type of lease, such as UAL has had with Eastern Air Lines, by which Eastern leased some of its aircraft to UAL during the summer months when UAL's traffic was relatively heavy, and UAL, in turn, leased some of its aircraft to Eastern during the winter season when Eastern's traffic was relatively heavy. Another exception is the "through run" interchange type of lease such as UAL has had in past years with Western Air Express, by which UAL operated equipment owned by Western from Salt Lake City east, and Western operated equipment owned by UAL from Salt Lake City west to Los Angeles, the purpose being to give passengers a through run between Los Angeles and points east of Salt Lake City.

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Contractual commitments for capital expenditures should be prepared for reasonably in advance of the time they are to become due. By this we mean that the airline should plan and arrange its financing program so as to have sufficient liquid capital and/or credit standing to afford reasonable expectation of obtaining the funds required to meet its forward commitments.

#### IV. Premises and Assumptions

The premises and assumptions on which we have designed the recommended financing program are as follows:

(1) That TWA's income (loss) before interest and income taxes during the years 1955 to 1958, both inclusive, would have been identical with what it actually was in those years, except for the following changes which have been supplied to us by PWCo.

(a) Loss before interest and income taxes for the year 1957 would have been approximately \$100,000 lower because of a reduction in provision for depreciation of piston aircraft due to lower cost resulting from the assumption that the aircraft were acquired directly from Lockheed Aircraft Corporation rather than through HTCo.

(b) Income before interest and income taxes for the year 1958 would have been approximately \$400,000 higher because of (i) a \$100,000 (approximate) reduction in provision for depreciation for the same reason set forth in (a) above, and (ii) a \$300,000 (approximate) increase in gain on sales of piston aircraft due to reconstruction of sales dates based on assumed earlier deliveries of jet aircraft.

(2) That TWA's income (loss) before interest and income taxes during the year 1959 and thereafter would have been as reconstructed by PWCo (see Exhibit: Financials - 29) on the basis of the timely delivery of the 63-plane jet fleet and related sales of piston aircraft. In asking us to make the foregoing assumption, Cahill, Gordon, Reindel & Ohl has also instructed us that, for purposes of the financing program, no reconstruction of TWA's income (loss) before interest and income taxes is to be made except in matters directly connected with the acquisition and financing of jet aircraft, and has advised us that no significant amount of jet operations would have been practicable before 1959. We do, however, give consideration to projections of cash flow made by Coverdale & Colpitts as of September 1955, September 1956 and April 1959 (see Exhibits: Financials - 9, 15 and 20) in the design of the financing program in terms of looking forward as of those dates.

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(3) That TWA's proceeds and gains and losses from sale of capital assets other than flight equipment during the entire period 1955-1960, both inclusive, would have been identical under the recommended financing program with what they actually were.

(4) That TWA's proceeds and gains and losses from sale of flight equipment during the period September 30, 1955 through September 30, 1958 would have been the same as were actually experienced.

(5) That proceeds from sale of piston aircraft during the last quarter of 1958 and thereafter would have been as reconstructed by RDS on the basis of on-time delivery of the 63-plane jet fleet. We do, however, give consideration to a projection of proceeds from sale of piston aircraft made by CMC as of April 1959, in the design of the financing program in terms of looking forward as of the latter date (see Exhibit: Financials - 20). And -

(6) That TWA's capital expenditure program during the entire period 1955-1960, both inclusive, would have been as reconstructed by PWCo (see Exhibit: Financials - 31). We do, however, give consideration to projections of capital expenditures prepared by PWCo as of September 1955, September 1956 and March 1959 (see Exhibits: Financials - 8, 14 and 19) in the design of the financing program in terms of looking forward as of those dates.

#### V. The Air Transport Situation in Early 1955

Prior to 1955, the major airlines had experienced five years of good earnings with the trend generally upward. In early 1955 it was generally recognized that the jet age was coming and that large amounts of additional capital from outside sources would be required to acquire jet aircraft and other facilities. However, there were wide differences of opinion as to the type of jet aircraft which would be preponderant. One school of thought favored the "straight jet"; another favored the gas turbine driven propeller type, generally referred to as the "prop-jet" or "turbo-prop". None of the airlines, so far as we know, could at that time estimate with any degree of certainty just how much additional capital would be required. But it was generally recognized that the amounts would be very large.

The following paragraphs indicate the general nature of the opinions expressed in aircraft manufacturing circles at the time. The information has been taken from annual reports.



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**Boeing:** In its 1954 annual report, published in the early part of 1955, Boeing refers to its B-47 (a jet bomber) as being "well established" in the military service, and states that considerable active interest had developed among airline operators in a commercial application of its jet prototype tanker-transport.

In its 1955 annual report, Boeing states that in venturing to build the 707 prototype (similar in general configuration to the jet tanker) it intended to demonstrate the advantages of jet transport to the military and to commercial airlines, and that to date (presumably early 1956) seven leading American and foreign commercial airlines had purchased eighty-four Boeing jet transports. And that additional sales were expected. Also, that the first American jet transport (the 707 prototype) was flown in July 1954.

From then on (meaning with the 1957 and subsequent annual reports), the Boeing Company indicates ever-increasing interest in commercial jet transports.

**Douglas:** In its 1955 annual report, published in early 1956, Douglas stated that in June 1955 it formally announced that it was ready to enter the jet transport market. (Prior thereto it appears that Douglas, although making progress with its "own jet transport project", was clinging to its piston-driven DC-7 as the suitable airplane for the airlines.) In its 1955 report, Douglas states that in November 1955 its DC-8 program was in "full swing", and that leading airlines had entered multimillion dollar contracts for it. Also, that as of the date of writing (early 1956) it had received orders for one hundred and five DC-8s.

From then on, Douglas, as with Boeing, indicates ever-increasing interest in, and sales of, jet transports.

**Lockheed:** This company appears to have been one of the turbo-prop school of thought in 1954 and 1955. Its 1954 annual report indicates that it was looking forward to the adaptation of its C-130 turbo-prop to commercial use. In its 1955 report, it states that it had won the American Airlines medium-range transport competition with its new prop-jet Electra. But Lockheed was apparently clinging to its piston-driven Constellation as a suitable airplane for long-distance operations of the airlines. The 1955 report also states that it would be very difficult for Lockheed simultaneously to develop and produce the Electra and a new turbo-jet.

**General Dynamics - Convair:** This company's 1956 annual report is the first one in which reference is made to a jet transport. It says that the Convair 880 was in the engineering and tooling stage, preparatory to production, and that forty had been ordered by Trans World Airlines and Delta Airlines.

Subsequent annual reports indicate increasing activity by Convair in the jet transport field.

We now turn to the annual reports issued by National Aviation Corporation, a well-known and, we think, well-qualified closed-end investment trust which limits its investments to securities of companies engaged directly or indirectly in the field of aviation. We summarize as follows certain portions of its annual reports.

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National Aviation 1953 Report: This report states categorically that it was all but a certainty that the (then) piston-engined newcomers (presumably the DC-7 and the Lockheed Super Constellation) were the last of their kind for mass travel by air, the reason being that the few companies concerned with commercial transport were all working on jets.

National Aviation 1954 Report: This report refers to the British invasion of the U. S. domestic airline market with the Vickers Viscount turbo-prop. And it states that the new "shape of things to come in 1955-58 is in ferment \* \* \*."

National Aviation 1955 Report: This report states that the airlines, after painstaking studies, were committing themselves for turbine-powered transports. It includes the following tabulation which it characterizes as "approximations".

#### Domestic Trunk Airlines

##### Mid January 1956

Total Assets .....	\$1,000,000,000
Net Worth .....	500,000,000
Orders for Turbine Aircraft .....	750,000,000

The report goes on to say that the above orders reflected only the initial commitments of seven of the thirteen trunk airlines which had reached a decision up to the date of the writing. A significant sentence in the report states that the airline industry had until (then) recently been restricted to short-term accommodations requiring high amortization rates, and that 1955 would be remembered as the year when lenders - particularly the insurance industry - concluded that 20-40 year airline loans with sinking fund payments waived during the first 10 years were an acceptable risk.

The report sums up by saying that the domestic trunk airlines were entering a period of intensified competition and were approaching a new era in powered flight.

National Aviation 1956 Report: This report deals extensively with the subject of commercial transports and, significantly, points out that the industry (meaning the airlines) would have to pay for over \$1,500,000,000 of new flight equipment in the (then) next four years.

It seems reasonable to conclude from the foregoing that in 1955 a well-advised management of any one of the major trunk airlines would get its financial affairs in a strong position to meet the then oncoming rush of money requirements.

#### VI. The Comparative Financial Status TWA and Its Competitors

##### Early 1955

The tabulation on the following page shows, in summarized figures, the balance sheets of TWA and its main competitors at December 31, 1954. Figures of Revenue Airplane Miles Flown and Available Seat Miles in 1954 are included to give an approximate idea of relative size of the four airlines. (See Exhibit: Comparisons - 4.)

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Summarized Balance Sheets

December 31, 1954

	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
	<u>(000 omitted)</u>			
Net Current Assets	\$ 4,089	\$ 9,757	\$ 37,656	\$ 11,315
Property, Plant, Flight Equipment, etc. - Net	84,414	115,162	95,475	131,918
Other Assets, Deferred Items, etc.	<u>1,682</u>	<u>19,607</u>	<u>3,874</u>	<u>4,284</u>
Net Current & Fixed Assets	<u>\$ 90,185</u>	<u>\$144,526</u>	<u>\$137,005</u>	<u>\$147,517</u>
Funded Debt	\$ 18,513	\$ 28,375	\$ 30,000	\$ 50,262
Deferred Credits, Reserves, etc.	4,465	4,719	2,750	4,369
Reconciliation Adjustment (*)	<u>-</u>	<u>5,137</u>	<u>-</u>	<u>-</u>
Total Deductions	<u>\$ 22,978</u>	<u>\$ 38,231</u>	<u>\$ 32,750</u>	<u>\$ 54,631</u>
Book Net Worth	<u>\$ 67,207</u>	<u>\$106,295</u>	<u>\$104,255</u>	<u>\$ 92,886</u>
Capital Structure - Percent				
Funded Debt	21.6%	21.1%	22.3%	35.1%
Equity	78.4%	78.9%	77.7%	64.9%
Total	100.0%	100.0%	100.0%	100.0%

Revenue Airplane Miles Flown - 1954	89,087	67,256	99,736	98,331
Available Seat Miles - 1954 (**)	4,768	3,713	5,095	5,010

(\*) For an explanation of this item, see Exhibit: Comparisons - 4

(\*\*) Millions.

On the basis of Revenue Airplane Miles Flown and Available Seat Miles, respectively, TWA was 33% to 28% larger than PAA; 10% to 7% smaller than AAL; and 9% to 5% smaller than UAL. Based on the foregoing yardsticks, TWA was short of proprietary capital by from \$69 million to \$74 million in comparison with PAA; by from \$27 million to \$30 million in comparison with AAL; and by from \$17 million to \$21 million in comparison with UAL. It is to be noted that PAA was engaged in the hotel business and had a substantial stake in Pan American Grace; its 1954 annual report shows investments in, and advances to, affiliates in the aggregate amount of \$13.5 million.

Another yardstick for comparing the relative size of TWA operations with those of PAA, AAL and UAL is overall available ton miles flown. Referring to Exhibit: Comparisons - 2, which has been prepared from figures published by the CAB, it is calculated that on the basis of 1954 figures TWA was 12.7% larger than PAA, 15.6% smaller than AAL, and 13.6% smaller than UAL. Based on



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this yardstick, TWA was short of proprietary capital by \$53 million in comparison with PAA, by \$21 million in comparison with AAL, and by \$13 million in comparison with UAL.

Thus, on the basis of the foregoing comparisons, it appears to us that in early 1955 TWA was very short of proprietary capital.

#### VII. The TWA Capital Expenditure Outlook

##### Early 1955

We doubt that in early 1955 the TWA management could make an accurate estimate of its forward capital expenditure program. But it seems reasonable to presume that the management would have at that time estimated the six-year total at over \$300 million, and probably nearer to \$400 million.

#### VIII. Estimated TWA Desirable Additional Equity

##### Early 1955

In the light of the foregoing, and recognizing that TWA was the only company conducting both U. S. transcontinental and transatlantic operations, we believe that TWA would have been well advised in early 1955 to obtain not less than \$50 million of additional proprietary capital. TWA's book net worth at December 31, 1954 was only \$67.2 million, a very low amount in relation to the capital expenditure program which it faced in the (then) next few years.

It is our opinion that we would have advised TWA in early 1955 to raise not less than \$50 million of additional equity capital. And that it be raised by an underwritten preemptive offering of common stock.

#### IX. Comparative Earnings TWA and Its Competitors

##### 1950 - 1954

The tabulation on the following page shows the results of TWA operations, year by year, in comparison with its three main competitors in the years 1950-1954, this being the five-year period immediately prior to the time when we are asked to assume that we would be advising TWA in regard to financial matters. (See Exhibit: Comparisons - 4.)

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Comparative Results of Operations - 1950-1954

	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
	(000 omitted)			
<u>Total Operating Revenue:</u>				
1950 .....	\$116,966	\$153,802	\$119,085	\$104,095
1951 .....	142,261	188,560	162,767	127,798
1952 .....	160,702	205,243	187,344	159,008
1953 .....	187,221	217,950	208,306	172,967
1954 .....	<u>203,671</u>	<u>213,524</u>	<u>214,766</u>	<u>200,719</u>
Total .....	<u>\$810,821</u>	<u>\$979,079</u>	<u>\$892,268</u>	<u>\$764,587</u>

<u>Net Operating Income:</u>				
1950 .....	\$ 11,461	\$ 3,392	\$ 23,647	\$ 12,629
1951 .....	15,999	10,261	29,908	18,527
1952 .....	14,787	6,566	26,383	24,328
1953 .....	10,818	16,345	27,471	19,026
1954 .....	<u>22,677</u>	<u>14,941</u>	<u>20,912</u>	<u>21,887</u>
Total .....	<u>\$ 75,742</u>	<u>\$ 51,505</u>	<u>\$128,321</u>	<u>\$ 96,397</u>

<u>Net Income Including Capital Gains:</u>				
1950 .....	\$ 7,882	\$ 4,064	\$ 10,400	\$ 6,430
1951 .....	7,660	6,546	10,549	8,563
1952 .....	7,661	6,673	12,514	10,684
1953 .....	5,064	10,803	13,413	9,072
1954 .....	<u>10,336</u>	<u>9,721</u>	<u>11,431</u>	<u>9,618</u>
Total .....	<u>\$ 38,603</u>	<u>\$ 37,807</u>	<u>\$ 58,307</u>	<u>\$ 44,367</u>

<u>Revenue Airplane Miles Flown:</u>				
1950 .....	60,285	53,060	60,560	55,868
1951 .....	63,386	57,305	77,534	61,447
1952 .....	69,557	60,185	89,444	74,820
1953 .....	81,142	62,009	103,731	85,152
1954 .....	<u>89,087</u>	<u>67,256</u>	<u>99,736</u>	<u>98,331</u>
Total .....	<u>363,457</u>	<u>299,815</u>	<u>431,005</u>	<u>375,618</u>

<u>Available Seat Miles: (*)</u>				
1950 .....	2,264	1,995	2,610	2,166
1951 .....	2,577	2,553	3,448	2,494
1952 .....	3,155	2,894	4,039	3,306
1953 .....	4,110	3,199	4,881	3,975
1954 .....	<u>4,768</u>	<u>3,713</u>	<u>5,095</u>	<u>5,010</u>
Total .....	<u>16,874</u>	<u>14,354</u>	<u>20,073</u>	<u>16,951</u>

For the Five Years 1950-1954

<u>Net Operating Income:</u>					
Per Revenue Airplane Mile	c	20.84	17.18	29.77	25.66
Per Million Available					
Seat Miles	\$	4,489.	3,588.	6,393.	5,687.

For the One Year - 1954

<u>Net Operating Income:</u>					
Per Revenue Airplane Mile	c	25.45	22.22	20.97	22.26
Per Million Available					
Seat Miles	\$	4,756.	4,024.	4,104.	4,369.

(\*) Millions

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It is fair to say that in the aggregate, over the five-year period 1950-1954, as measured by Net Operating Revenue per Airplane Mile and by Net Operating Revenue per Million Available Seat Miles, TWA did particularly well in comparison with PAA, but not so well in comparison with AAL and UAL. However, in 1954, the last year of the five-year period, and using the same unit figures as yardsticks, TWA turned in a better performance than any of its three main competitors. The terrific growth of the operations of all four companies is noteworthy.

The following tabulation shows the TWA income account in more detail for the five years preceding 1955. (See Exhibit: Comparisons - 4.)

<u>TWA Income Account - 1950-1954</u>							
	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>Aggregate Annual 1950-54</u>	<u>Annual Average</u>
	(000 omitted)						
Net Operating Income	\$11,461	\$15,999	\$14,787	\$10,818	\$22,677	\$ 75,742	\$15,148
Gain (loss) from Sale of Property and Equipment	(95)	306	512	504	(38)	1,189	238
Other Income	<u>247</u>	<u>332</u>	<u>324</u>	<u>394</u>	<u>114</u>	<u>1,411</u>	<u>282</u>
Income Available for Interest, Income Taxes, etc.	\$11,613	\$16,637	\$15,623	\$11,716	\$22,753	\$ 78,342	\$15,668
Fixed Charges - Interest, etc.	<u>1,712</u>	<u>1,889</u>	<u>1,928</u>	<u>1,786</u>	<u>1,467</u>	<u>8,782</u>	<u>1,756</u>
Net Before Income Taxes	\$ 9,901	\$14,748	\$13,695	\$ 9,930	\$21,286	\$ 69,560	\$13,912
Income Taxes	<u>2,019</u>	<u>7,088</u>	<u>6,034</u>	<u>4,866</u>	<u>10,950</u>	<u>30,957</u>	<u>6,191</u>
Net Income	<u>\$ 7,882</u>	<u>\$ 7,660</u>	<u>\$ 7,661</u>	<u>\$ 5,064</u>	<u>\$10,336</u>	<u>\$ 38,603</u>	<u>\$ 7,721</u>
Depreciation Charges	\$11,263	\$12,125	\$17,010	\$23,465	\$21,554	\$ 85,417	\$17,083
Cash Throw-Off	<u>\$19,145</u>	<u>\$19,785</u>	<u>\$24,671</u>	<u>\$28,529</u>	<u>\$31,890</u>	<u>\$124,020</u>	<u>\$24,804</u>
Coverage of Fixed Charges:							
Including Capital Gains	6.8	8.8	8.1	6.6	15.5		9.2
Excluding Capital Gains	6.8	8.6	7.8	6.3	15.5		9.0
Net Income Per Share (*)	\$3.25	\$3.15	\$2.30	\$1.52	\$3.10		\$2.66

( ) Denotes red figure.

(\*) Per share figures for 1950 and 1951 do not check with Exhibit: Financials - 2, which are taken from the annual report for 1954 and are on the basis of 3,337,000 shares outstanding throughout the period. The above figures are based on the number of shares outstanding at each year end.

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X. Interim Earnings  
TWA and Its Competitors

Early 1955

Under this heading we are examining into the news releases and interim earnings reports put out in the early part of 1955 by the four airlines. This is being done to throw light on the market climate for their common stocks at that time.

TWA

The following are brief summaries of the TWA news releases put out in the first half of 1955.

March 31, 1955

Earnings of \$3.10 per share in 1954. Double those of 1953. No subsidy. Stockholder equity \$20.14 per share.

May 5, 1955

First quarter loss \$3,898,000 or \$1.17 per share, as compared with first quarter of 1954 loss of \$3,965,000 or \$1.19 per share. Prospects for balance of 1955 are "bolstered" by increase in bookings and by addition of 20 Super-G Constellations to the TWA fleet.

PAA

This company did not release quarterly earnings statements until 1956. The following figures are those reported to the CAB and have been taken from the (then) current section of Moody's manual. It is to be noted that the caption is "Net Operating Income After Taxes", rather than "Net Income" or "Net Earnings". Thus, it appears that the figures do not include gain or loss on sale of aircraft. Also, the sum of the interim figures does not check out with the annual figures reported in the annual reports. With the foregoing qualifications, the PAA interim earnings figures for 1954 and the first half of 1955 are submitted as follows:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>
<u>1954 - Quarterly</u>			
Net Operating Income			
After Taxes (000 omitted)	\$ 712	\$3,478	\$6,105
Equals per Share (*)	\$0.12	\$0.57	\$1.00
<u>1955 - Quarterly</u>			
Net Operating Income			
After Taxes (000 omitted)	\$3,357	\$4,342	
Equals per Share (*)	\$0.55	\$0.71	

(\*) Calculated by HRCO on basis of 6,091,822 shares outstanding at 1954 year end and 6,137,753 shares outstanding at 1955 year end.

AAL

The following figures were released by AAL. However, the 1954 figures are qualified as follows. The figure for the first quarter of 1954 includes a profit of \$274,000, before tax, on sale of aircraft; and the figure for the second quarter was increased by \$583,000 or \$0.09 per share by a change in depreciation policy.

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	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>
<u>1954 - Quarterly</u>			
Reported Net Income (000 omitted)	\$ 446	\$4,568	\$ 452
Reported Net Income per Share	\$0.01	\$0.65	\$0.02

<u>1955 - Quarterly</u>			
Reported Net Income (000 omitted)	\$2,483	\$6,054	
Reported Net Income per Share	\$0.30	\$0.79	

	<u>First Six Months</u>	<u>First Nine Months</u>
<u>1954 - Cumulative</u>		
Reported Net Income (000 omitted)	\$5,014	\$5,466
Reported Net Income per Share	\$0.66	\$0.68

<u>1955 - Cumulative</u>		
Reported Net Income (000 omitted)	\$8,537	
Reported Net Income per Share	\$1.09	

UAL

The published UAL interim figures for 1954 and the first half of 1955 have no qualifications. However, they differ from the pattern of the other three airlines because UAL published its earnings figures by quarters and also uniformly published not only the cumulative six months and nine months figures but also its cumulative figures for the (then) past twelve months. The figures are set forth in the following tabulation. We are omitting the cumulative figures for six and nine months because we think that the cumulative twelve months figures are more enlightening.

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>
<u>1954 - Quarterly</u>			
Reported Net Income (000 omitted)	\$(1,069)	\$ 3,542	\$ 5,961
Reported Net Income per Share	\$(0.53)	\$1.34	\$2.32

<u>1955 - Quarterly</u>			
Reported Net Income (000 omitted)	\$ 466	\$ 3,087	
Reported Net Income per Share	\$0.09	\$1.39	

	<u>Ended 3/31</u>	<u>Ended 6/30</u>	<u>Ended 9/30</u>
<u>1954 - Cumulative - 12 Months</u>			
Reported Net Income (000 omitted)	\$ 7,662	\$ 7,477	\$ 9,482
Reported Net Income per Share	\$2.72	\$2.64	\$3.46

<u>1955 - Cumulative - 12 Months</u>			
Reported Net Income (000 omitted)	\$11,153	\$11,417	
Reported Net Income per Share	\$4.07	\$4.20	

( ) Denotes loss.

XI. Dividend Records  
TWA and Its Competitors

1954 - 1955

On Exhibit: Comparisons - 13, figures are set forth showing the dividend records of TWA and its three main competitors from 1950 onward.

TWA did not pay any cash dividends in the period covered by the exhibit; however, in October of 1952 it declared a 10% stock dividend which it



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paid in January 1953.

In 1954 and 1955, PAA was paying regular quarterly cash dividends of 20¢ per share.

AAL paid regular quarterly cash dividends of 15¢ per share in 1954 and 20¢ per share in 1955.

UAL paid regular quarterly cash dividends of 25¢ per share in each of the first three quarters of 1954 and 1955 and year-end cash dividends of 75¢ per share to stockholders of record in November 1954 and November 1955.

Thus, in 1955 TWA was paying no cash dividends and had no dividend record, whereas each of its three main competitors had a respectable cash dividend record; PAA and AAL were on a regular annual cash dividend basis of 80¢ per share; and UAL was on a regular annual cash dividend basis of \$1.50 per share.

#### XII. The General Stock Market Situation

##### 1954 and the First Half of 1955

The stock market in general was strong and advancing throughout 1954 and the first half of 1955. The Dow-Jones Industrials were as follows:

	<u>High</u>	<u>Low</u>
January 1954 .....	293	280
June 1954 .....	337	319
January 1955 .....	409	388
June 1955 .....	451	424
Percent Advance Jan. 1954 - June 1955	54%	51%
Percent Advance Jan. 1955 - June 1955	10%	9%

The market quotations for the common stocks of TWA's main competitors, as reported by the Bank and Quotation Record, were as follows. (TWA will be dealt with separately.)

	<u>PAA</u>		<u>AAL</u>		<u>UAL</u>	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
January 1954	10-3/4	9-3/8	13-1/8	11-1/2	24-3/8	21-1/2
June 1954	12-1/8	10-3/4	14	11-7/8	23-5/8	21-1/2
January 1955	19-3/4	16-7/8	23-3/4	20-1/2	40-1/8	34-1/4
February 1955	20-1/2	18-1/8	26	23-1/2	43	38-3/4
March 1955	20-1/4	17-1/8	27-3/8	22-1/2	46	38-5/8
April 1955	20-1/2	18-1/4	28-3/8	26	48-3/8	43-1/4
May 1955	20-1/2	18-1/4	27-7/8	25-1/2	44-1/4	41-3/8
June 1955	22	19-1/4	29-1/8	27-1/8	48-3/8	43-1/2
Percent Advance -						
Jan. 1954-June 1955	104%	105%	122%	136%	98%	102%
Jan. 1955-June 1955	11%	14%	23%	32%	21%	27%

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From the foregoing figures it will be noted that both over the one and one-half year period January 1954-June 1955 and for the six months' period January-June 1955, the stocks of TWA's three main competitors advanced in greater amounts, percentagewise, than the Dow-Jones Industrials.

### XIII. The TWA Stock Market Situation

#### 1950 Through the First Half of 1955

The following tabulation shows a comparison of the market prices of TWA stock with the Standard & Poor's Index of Air Transport Stocks. It also shows the AIMV of TWA and the book value of TWA shares. Relating the figures to those set forth in the preceding chapter, it will be noted that in the one and one half years January 1954-June 1955 TWA stock advanced in market price by a greater percentage than the advance of the Standard & Poor's Index of Air Transport Stocks, and by more than the advance of the Dow-Jones Industrials. Also, in the foregoing one and one-half year period TWA stock performed better than the stocks of its three main competitors. In the first half of 1955 TWA stock advanced about the same as the Dow-Jones Industrials, but not as much percentagewise as the stocks of its three main competitors.

#### TWA Stock Market and Related Figures

	S. & P.'s Index of Air Trans- port Stocks	Market Price per sh.	T W A		Book Value per sh. End of Month
			No. of Shares Out- standing	AIMV	
			(*) -- (000 omitted) --	(Approx.)	
December 31, 1950 .....	16.49	23-3/4	2,427	\$ 57,600	\$10.55
December 31, 1951 .....	21.58	24-1/8	2,430	58,600	13.75
December 31, 1952 .....	18.83	17-7/8	3,330(**)	59,500	15.53
December 31, 1953 .....	15.80	12-7/8	3,333	42,900	17.04
December 31, 1954 .....	27.93	29-3/4	3,337	99,300	20.14
January 1955 .....	28.18	29-1/4	3,337	97,600	19.92
February 1955 .....	31.15	31-1/4	3,337	104,300	19.23
March 1955 .....	31.85	31-1/2	3,337	105,100	18.94
April 1955 .....	33.76	31-1/4	3,337	104,300	19.19
May 1955 .....	32.77	31-5/8	3,337	105,500	19.67
June 1955 .....	35.98	31-5/8	3,337	105,500	20.40
Percent Advance -					
December 1950 - December 1954	69%	-	-	-	-
December 1953 - June 1955	128%	146%	-	146%	-
December 1954 - June 1955	29%	6%	-	6%	-

(\*) At month end. Round number figures for 1955 are taken at the same amount as for December 1954; the change during 1955 was only 279 shares.

(\*\*) 594,596 shares issued and sold in 1952. Also, a stock dividend of 10% was declared in October 1952 and paid in January 1953.

**Note:** Figures for Standard & Poor's Index are monthly averages of weekly price indexes. (See Exhibit: General - 6.) TWA stock prices are month end closing prices. (See Exhibit: Trans World - 9.)

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Thus, the market for TWA stock in the first six months of 1955 showed no sign that investors were worried about the TWA losses reported for the first quarter. The seasonal character of TWA's operations and those of other airlines was generally recognized.

The following tabulation shows the volume of trading in TWA stock on the NYSE during 1954 and the first half of 1955, expressed in terms of numbers of shares and in approximate dollar amounts.

Volume of Trading - TWA Common Stock (*)						
	1954			1955		
	Volume of Trading Shares(*)	Approximate Price per sh.(**)	Approximate Dollar Volume	Volume of Trading Shares(*)	Approximate Price per sh.(**)	Approximate Dollar Volume
January	29,700	14	\$ 416,000	73,100	29	\$ 2,120,000
February	14,300	14	200,000	94,600	30	2,835,000
March	20,100	14	282,000	83,600	30	2,508,000
April	35,200	15	528,000	65,100	32	2,083,000
May	16,300	15	244,000	52,300	30	1,569,000
June	36,500	16	584,000	111,700	33	3,686,000
July	46,000	17	782,000			
August	85,200	19	1,619,000			
September	56,300	19	1,072,000			
October	153,300	22	3,373,000			
November	87,200	24	2,093,000			
December	116,300	28	3,260,000			

(\*) See Exhibit: Trans World-10.

(\*\*) Mean of the high and low prices during each month, rounded to the nearest dollar.

The following tabulation shows a comparison of the market prices of TWA stock with its book values at year ends over the five-year period preceding 1955, and at the middle of 1955.

TWA - Relationship of Book Value to Market Price				
	Book Net Worth	Number of Shares Outstanding	Book Value per share	Market Price per share
	---(000 omitted)---			
December 31, 1950 .....	\$ 25,608	2,427	\$10.55	23-3/4
December 31, 1951 .....	33,406	2,430	13.75	24-1/8
December 31, 1952 .....	51,699	3,330 (*)	15.53	17-7/8
December 31, 1953 .....	56,804	3,333	17.04	12-7/8
December 31, 1954 .....	67,207	3,337	20.14	29-3/4
June 30, 1955 .....	68,075	3,337	20.40	31-5/8

(\*) Including the 594,596 shares issued and sold in 1952 and the 10% stock dividend declared in December 1952 and paid in January 1953.

Note: Market prices are month/end closing prices. (See Exhibit: Trans World-9.)

From the foregoing it will be noted that the market for TWA stock was strong in terms of price and trading volume in early 1955, and that market prices were much above book values.



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We now turn to the relationship of market prices to earnings per share for TWA and its three main competitors. For this purpose we use the "Investment Guide Cards" put out by Standard & Poor's Corporation in 1955. It is to be noted that Standard & Poor's figures for TWA earnings per share for 1950 and 1951 differ from those given on Exhibit: Comparisons - 4, because Standard & Poor's gives effect retroactively to the TWA 10% stock dividend declared in December 1952 and paid in January 1953, whereas the figures for TWA shown on Exhibit: Comparisons - 4 are based on the actual number of shares outstanding at each year end. We think that the Standard & Poor's figures for TWA are the most appropriate ones to use, particularly so because they are comparable to the figures which Standard & Poor's published for the three other airlines.

The figures reported on the 1955 cards, for the five years preceding 1955, are as shown in the following tabulation.

<u>Comparative Earnings Per Share</u>				
	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
1950 .....	\$2.94	\$0.66	\$1.39	\$2.90
1951 .....	2.87	1.07	1.42	3.58
1952 .....	2.30	1.09	1.72	4.03
1953 .....	1.52	1.77	1.86	3.28
1954 .....	3.10	1.71	1.51	3.52
Average - 5 years 1950-54 ....	\$2.55	\$1.26	\$1.58	\$3.46
Average - 3 years 1952-54 ....	2.31	1.52	1.70	3.61
Average Market Price - April, May, June 1955 (*) ..	\$31.67	\$19.79	\$27.33	\$44.92

(\*) Figures are the average of high and low prices taken from the Bank and Quotation Record.

Notes:

TWA - The 1954 TWA annual report shows \$2.36 and \$2.30 earned per share for 1950 and 1951, respectively, and states that the net income per share for all years has been calculated on the number of shares outstanding as of December 31, 1954. On this basis, the five-year average would be \$2.32. It seems to us that the annual report method of presenting the figures does not allow for the entrance of \$10 million of new capital through issuance of shares in two separate issues in 1952. (See Exhibit: Financials - 2.)

PAA - The 1955 annual report shows \$1.69 earned per share for 1954.

AAL - Standard & Poor's states that the figure of \$1.51 earnings per share for 1954 is before a "special credit" which equals \$0.46 per share. Thus, including the "special credit" the earnings figure would be \$1.97 per share for 1954; the five-year average would be \$1.67; and the three-year average would be \$1.85.

UAL - No corresponding differences in figures.

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Translating the foregoing figures into price/earnings ratios (P/E), taking prices at average market price during April, May and June 1955, and using the Standard & Poor's figures of earnings per share, brings the following results.

	<u>Price/Earnings Ratios - Times</u>			
	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
Five-Year Average 1950-54 .....	12.4	15.7	17.3	13.0
Three-Year Average 1952-54 .....	13.7	13.0	16.1	12.4

Using the TWA 1954 annual report figures, the above five-year average P/E ratio of 12.4 times becomes 13.7 times. With AAL the ratios become 16.4 times and 14.8 times (instead of 17.3 times and 16.1 times) if the "special credit" for 1954 is included.

The higher P/E ratios for PAA and AAL, than for TWA, were probably due to the better long-term historical earnings records of those two companies, and to the absence of cash dividends on TWA stock. TWA was selling at about the same P/E ratios as UAL, although UAL had a better long-term historical earnings record than TWA and was paying cash dividends whereas TWA was not.

We now turn to the "Recommendation" which is uniformly set forth at the top of each Investment Guide Card put out by Standard & Poor's, our purpose being to see what investors were being advised by that service, in the first half of 1955, in regard to the stock of each of the four airlines.

#### TWA

The March 1 and May 25, 1955 cards say: "With favorable earnings indicated over the foreseeable future, the shares currently appear better held than sold."

#### PAA

In the cards issued under date of February 4 and May 11, 1955, it is said that "The stock may be held in speculative accounts".

#### AAL

In the cards issued under date of March 21 and June 1, 1955, it is said " \* \* \* the Common is recommended for purchase".

#### UAL

In each of three cards issued February 1, March 23 and June 9, 1955, it is said " \* \* \* we would buy the Common".

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So, Standard & Poor's in the first half of 1955 was advising investors to hold TWA and PAA, and to buy AAL and UAL.

We next turn to Moody's Stock Survey, a weekly publication put-out by Moody's Investor's Service, our purpose being to see what investors were being advised by that service, in the first half of 1955, in regard to airline stocks.

TWA

In its January 31, 1955 issue, Moody's Stock Survey says: "Trans World Airlines (27) to hold for speculative appreciation over a period is justified by present trends in the industry. This is far removed, however, from being a high-quality, investment issue."

PAA

Moody's Stock Survey did not say anything in 1955 regarding PAA stock until its June 20, 1955 issue, in which it said: "We suggest that Pan American World Airways stock be held for longer term speculative possibilities. The depressing effect of mail subsidy uncertainties has caused it to lag well behind other airline equities, but traffic growth should gradually lessen mail pay's importance."

AAL

In its April 11, 1955 issue, Moody's Stock Survey says: "Although American Airlines' common is close to its record high price and not immune to some interim irregularity, long-term growth potentialities are still considerable. We would hold it, but convert the preferred."

UAL

In its January 3, 1955 issue, Moody's Stock Survey says: "United Air Lines (38). The rise in price of this stock came earlier than we expected. It is now quite fully priced, but is one of the best airline issues."

So, Moody's Stock Survey in the first half of 1955 was advising investors to hold all four of the leading airline stocks.

XIV. Recommended TWA Equity Financing

May 1955

The tabulation on the following page summarizes the TWA capital stock situation as of May 1955.

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TWA Stock Situation  
May 1955 - Approximate

Capital Stock - Authorized, par value \$5. per share	4,000,000 shares
- Outstanding .....	3,337,000 "
Book Net Worth - end of month .....	\$ 65,600,000
Book Value per share - end of month .....	\$19.67
Market Price per share .....	\$31.00
ADMV .....	\$103,400,000
Historic Earnings - Net Income:	

	<u>Company</u>	<u>Per Share (*)</u>
1950 .....	\$ 7,882,000	\$ 2.94
1951 .....	7,660,000	2.87
1952 .....	7,661,000	2.30
1953 .....	5,064,000	1.52
1954 .....	<u>10,336,000</u>	<u>3.10</u>
Total .....	<u>\$ 38,603,000</u>	
Average - 1950-1954	<u>\$ 7,721,000</u>	<u>\$ 2.55</u>

(\*) From Standard & Poor's.

We would have advised and urged TWA, in the spring of 1955, to put out a major equity issue in the first half of that year. The stock market was strong and its trend was upward. The first half of 1955 was the time for TWA to correct its obviously short proprietary capital position and prepare for the jet age. (\*) We would have recommended that the equity financing be effected in April or May. The regular 1954 year end audit would comply with the SEC rule for listed companies.

The choice would have been between a convertible preferred stock and a common stock issue. With a preferred stock the conversion price recommended would have been close to the (then) market, the deliberate purpose being to sell (through conversion) common stock at a price higher than that at which it could have been sold as such. We would have recommended that the issue, whether preferred or common, be underwritten by a large group of investment houses, taking care that the group be representative of the cities served by TWA.

Neither PAA nor UAL had any preferred stock outstanding in early 1955. AAL had \$22 million of convertible preferred bearing the very low dividend rate of 3-1/2%, which was quite certain to be converted in the (then) not distant future. In our opinion TWA, in 1955, could not have obtained a preferred dividend rate of less than 5% on an issue of any substantial amount, even though convertible which it would have to be. Moreover, TWA needed too large an amount of new money to make a preferred issue practicable. Expressed in another way, TWA had "missed the boat" for a preferred stock issue. (AAL issued \$5 million of

(\*) In February 1955 General Motors issued and sold \$328 million of Common Stock. Goodyear Tire & Rubber sold \$45 million in July.



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4-1/4% Convertible Preferred Stock in 1940 and \$40 million of 3-1/2% Convertible Preferred Stock in 1946. UAL issued a total of about \$42 million of 4-1/2% Convertible Preferred Stock in 1943, 1947 and 1952.) Also, considering that the preferred dividend would not be deductible for corporate income tax purposes, and being faced with a huge capital expenditure program, we would not have recommended a preferred stock issue in 1955. We would have left preferred stock as a possible medium of equity finance for the future.

In our opinion we would have recommended a common stock issue to be offered preemptively to the TWA stockholders in May 1955 on the following basis. A stockholders' meeting would have been required to increase the authorized common stock upward from 4,000,000 shares. We would have recommended an authorization of 10,000,000 shares.

Recommended Preemptive Offering

Number of Shares Outstanding prior to offering, April 30..	3,336,546 shares (*)
Ratio .....	1 New for 1 Old
Number of Shares Offered .....	3,336,546 shares
Percent Maximum Dilution .....	50%
Market Price Prior to Announcement of Offering (approx.)..	\$31.00 per share
Theoretical Minimum Subscription Price .....	\$15.50 " "
Subscription Price .....	\$17.50 " "
Percent Subscription Price to Theoretical	
Minimum Subscription Price .....	113%
Aggregate Amount of Offering at Subscription Price (approx.)	\$ 58,390,000
Estimated Underwriting Spread:	

	<u>Per Share</u>	<u>Percent</u>
Minimum .....	45¢	2.57%
Maximum .....	90¢	5.14%

Estimated Spread Realized (see Exhibit: General - 12):

Percent .....	4.5%
Aggregate Amount .....	\$ 2,627,500

Estimated Expenses .....	\$ 250,000
Estimated Total Cost of Issue .....	\$ 2,877,500
Estimated Net Proceeds of Issue .....	\$ 55,512,500
Estimated Net Proceeds of Issue (say) .....	\$ 55,500,000
AIMV at Subscription Price, after offering .....	\$116,800,000
As compared with AIMV Prior to Offering .....	\$103,400,000
Increase .....	\$ 13,400,000
As compared with Estimated Net Proceeds of Issue - as above	\$ 55,500,000

Number of Shares Outstanding after offering, May 31 .....	6,673,288 shares (**)
Book Value per share, May 31 .....	\$18.15
Book Net Worth, May 31 .....	\$121,134,000

Closing ..... June 1, 1955.  
Application of Proceeds: (1) to redeem, on July 1, 1955, at 103-3/4 and interest, \$35,000,000 principal amount of 3-3/4% Equipment Mortgage Bonds; (2) to reimburse NTCO on June 1, 1955 for its down payment of \$16.8 million on, and transfer to TWA of, its contract with Lockheed for 25 L1649A aircraft, plus interest at 3%; and (3) deposit with Lockheed of \$2.4 million for 5 L1049G aircraft.

(\*) The number of shares outstanding April 30, 1955, which is assumed as the record date.

(\*\*) Sum of 3,336,742 shares which were outstanding May 31, 1955 plus the 3,336,546 shares offered.

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The foregoing equity program was, in our opinion, doable at the time. A question may arise as to why we have provided for the retirement of the 3-1/4% Equipment Mortgage Bonds. The answer is that we would have tried to get the holder of the issue to "roll it over" into the new loan which we outline further on in this report. But we do not see fit, for the purposes of this report, to assume that our effort would have been successful. Hence, we have provided for the retirement, by redemption, of the entire issue from the proceeds of the equity issue.

TWA had an open end of \$5 million on its December 1954 Equipment Mortgage, and a \$10 million revolving term credit agreement with banks which was arranged in 1954 and was secured by a chattel mortgage on some flight equipment. However, no borrowings were outstanding against the term bank credit agreement as of the time of the recommended equity financing. (The 1954 annual report, dated March 21, 1955, states that against the term bank credit agreement \$2 million had been borrowed at December 31, 1954 but had since been repaid.) We would have recommended the cancellation of both the open end on the mortgage and the term bank credit agreement, so as to start with a clean slate for financing the large capital expenditure program.

XV. TWA Reconstructed Balance Sheet

September 30, 1955

Giving effect to the foregoing equity financing, TWA would have had a consolidated balance sheet, as of September 30, 1955, as set forth on the following page. (See Exhibit: Financials - 7.) We select September 30 because we believe that in the summer of 1955 TWA would have been negotiating for borrowed capital to meet a substantial part of its large capital expenditure program, and in the fall of 1955 would have been negotiating with Boeing for 33 jet transports.

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TWA

Reconstructed Consolidated Balance Sheet  
Giving Effect to the May 1955 Equity Financing  
as at September 30, 1955

	(Millions)
Net current assets .....	\$ 11.4
Flight equipment, at cost .....	186.3
Less - Reserves for depreciation and obsolescence .....	<u>100.8</u>
	\$ 85.5
Deposits with manufacturers (*) .....	19.6
Construction work in progress - flight equipment, at cost. ....	<u>0.3</u>
Net flight equipment .....	\$ 105.3
Net ground property and equipment .....	<u>12.9</u>
Net property, equipment and deposits with manufacturers .....	\$ 118.3
Investments and long-term prepayments .....	<u>3.4</u>
Total tangible assets, less current liabilities .....	<u>\$ 133.1</u>
Long-term debt .....	\$ -
Other noncurrent liabilities .....	1.2
Deferred federal income taxes .....	<u>5.9</u>
Total noncurrent liabilities and deferred credit .....	<u>\$ 7.1</u>
Tangible net worth .....	\$ 126.0
Deferred debits .....	<u>1.4</u>
Book net worth .....	<u>\$ 127.4</u>
Capital stock (**) .....	\$ 33.4
Capital surplus .....	61.2
Retained earnings .....	<u>32.8</u>
Total stockholders' equity .....	<u>\$ 127.4</u>
Book net worth per common share .....	<u>\$ 19.09</u>

(\*) Includes \$19.2 million down payments with Lockheed on contracts for 25 L1649A aircraft and 5 L1049G aircraft.

(\*\*) Represented by 6,673,371 shares, this being the sum of 3,336,825 shares outstanding historically on September 30, 1955 plus 3,336,546 shares issued in the May 1955 equity financing.

The tabulation on the following page sets forth, in summarized form, TWA's historical and reconstructed balance sheets in comparison with the AAL and UAL balance sheets, all four as of September 30, 1955. The PAA summarized balance sheet is as of December 31, 1955; we were not able to obtain a PAA balance sheet as of September 30, 1955.

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Summarized Balance Sheets

September 30, 1955

	<u>T W A</u>		<u>PAA (*)</u>	<u>AAL</u>	<u>UAL</u>
	<u>Historical</u>	<u>Reconstructed</u>	- - - - -	- <u>Actual</u> - - - - -	- - - - -
	(000 omitted)				
Net Current Assets	\$ 10,800	\$ 11,400	\$ 23,817	\$ 56,335	\$ 15,447
Property, Plant, Flight Equipment, etc. - Net	98,900	118,300	130,472	89,164	125,450
Other Assets, Deferred Items, etc.	<u>4,800</u>	<u>4,800</u>	<u>20,958</u>	<u>3,700</u>	<u>4,192</u>
Net Current and Fixed Assets	<u>\$114,500</u>	<u>\$134,500</u>	<u>\$175,247</u>	<u>\$149,199</u>	<u>\$145,089</u>
Funded Debt	\$ 35,000	\$ -	\$ 53,225	\$ 30,000	\$ 37,012
Deferred Credits, Reserves, etc.	7,100	7,100	7,830	4,890	6,503
Reconciliation Adjustment (**)	-	-	<u>1,670</u>	-	-
Total Deductions	<u>\$ 42,100</u>	<u>\$ 7,100</u>	<u>\$ 62,725</u>	<u>\$ 34,890</u>	<u>\$ 43,515</u>
Book Net Worth	<u>\$ 72,400</u>	<u>\$127,400</u>	<u>\$112,522</u>	<u>\$114,309</u>	<u>\$101,574</u>
<u>Capital Structure -</u>					
<u>Percent</u>					
Funded Debt	32.6%	-	32.1%	20.8%	26.7%
Equity	67.4%	100.0%	67.9%	79.2%	73.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
<u>Statistics -</u>					
<u>Year 1955</u>					
Revenue Airplane Miles Flown	97,249		80,068	121,686	110,031
Available Seat Miles (***)	5,405		4,327	6,409	5,892
Available Ton Miles	655,270		608,234	856,459	782,980

(\*) From PAA balance sheet dated December 31, 1955.  
No September 30, 1955 balance sheet was published by PAA.

(\*\*) For an explanation of this item, see Exhibit:  
Comparisons - 4.

(\*\*\*) Millions.

It will be noted that TWA, reconstructed to give effect to the May 1955 equity financing, bears no similarity to the historical TWA. It is free of funded debt, conditional sales obligations and bank loans. It owns its flight equipment outright; and it has made \$19.2 million down payments for 30 Lockheed aircraft.



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#### XVI. Flight Equipment Expendable Parts

In this chapter we will outline how we deal with the above item in this report, and why we do so.

Effective January 1, 1957 the CAB changed its Uniform System of Accounts for Air Carriers in such manner as to include the cost of Flight Equipment Expendable Parts in Current Assets, whereas prior thereto it was included in Property and Equipment. (\*) Flight Equipment Expendable Parts bears the account number 1310 in the aforementioned uniform system and is defined as including the cost of replacement parts of a type which ordinarily would be recurrently expended and replaced rather than repaired and reused. Thus, it does not include rotatable parts and assemblies of material value which ordinarily are repaired and reused.

Throughout this report we are including Flight Equipment Expendable Parts in the cost of Flight Equipment, our reasons for doing so being: (1) for the purpose of uniformity of balance sheet presentation throughout the period of time dealt with herein; and (2) we propose to include this item, along with aircraft and engines, in the property to be mortgaged. (It is included in the mortgaged property under the provisions of the TWA Indenture of Mortgage dated December 1, 1960.)

#### XVII. The TWA Reconstructed Situation

September 1955

The TWA reconstructed balance sheet as of September 30, 1955 has been set forth in a previous chapter. And it has been pointed out that TWA would have been free of debt and would have owned its flight equipment outright. Its decks would have been cleared for its aircraft and facilities expansion program. We now proceed to deal with its projected capital expenditure program as of September 1955 and the financing thereof.

TWA's capital expenditure program, as projected by PWCo as of September 30, 1955, is set forth in summarized form in the following tabulation. (See Exhibit: Financials-8.)

(\*) It was not until its 1963 annual report that AAL complied with the revised treatment of this item in its published annual reports.

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	<u>Property and Equipment</u>				<u>Total</u>
	<u>Jet Fleet</u>	<u>Piston Fleet</u>	<u>Ground and Nonoperating</u>	<u>Deferred Debits</u>	
	(Millions)				
1955 - 4th quarter	\$ 9.0	\$ 7.5	\$ 2.1	\$ (0.8)	\$ 17.8
1956 - Year	38.5	26.1	7.3	1.3	73.2
1957 - Year	19.8	55.7	9.9	2.1	87.5
1958 - Year	23.6	2.2	6.6	0.7	33.1
1959 - Year	102.2	0.1	7.4	(0.5)	109.2
1960 - Year	<u>46.0</u>	<u>-</u>	<u>8.0</u>	<u>0.5</u>	<u>54.5</u>
Total	<u>\$239.1</u>	<u>\$ 91.6</u>	<u>\$ 41.3</u>	<u>\$ 3.3</u>	<u>\$375.3</u>

( ) Denotes red figure.

With respect to the foregoing projection, it should be noted that:

(1) It includes provision for the cost of all piston-driven aircraft then on order and for advance, progress and final payments for the 33 Boeing jet transports for delivery prior to the end of 1960.

(2) It includes provision for a down payment of \$25 million for the (as then) not selected medium/long-range airplane. And -

(3) The figures are over and above the \$19.2 million advance payments for aircraft which are incorporated as a part of the book value of Flight Equipment in the reconstructed balance sheet as of September 30, 1955.

We now proceed to deal with the situation (i.e., TWA reconstructed in September 1955) in terms of projected money requirements. (See Exhibit: Financials - 10.) The following is a description of the basis on which Exhibit: Financials - 10 has been prepared.

(1) Figures for net income, deferred taxes and for depreciation and amortization are taken from the C&C forecast of funds generated as of September 1955. (See Exhibit: Financials - 9.) This C&C forecast is based on timely acquisition (meaning prior to December 31, 1960) of the 33 Boeing jet transports; but it makes no allowance for earnings from, or depreciation of, the medium/long-range transports not yet selected in September 1955.

(2) It (the projection of money requirements) makes no allowance for the sale of property..

(3) Like all projections of money requirements included in this report, it makes no allowance for the cost of required new capital such as interest, commitment fees, agency fees, etc.

(4) It provides for the capital expenditure program as projected by PWCo as of September 1955. And -

(5) It starts with the amount of reconstructed TWA working capital as at September 30, 1955 and provides for a desirable working capital of \$10 million excluding Flight Equipment Expendable Parts.

The projection shows, on the foregoing basis, the amount of new money (meaning from outside sources) required quarter by quarter and cumulatively

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from September 30, 1955. The following tabulation sets forth the figures in summarized year-by-year form.

<u>TWA</u> <u>Projection of Money Requirements</u> <u>as of September 1955</u>		
	<u>By Period</u>	<u>Cumulative from September 30, 1955</u>
	<u>----- Millions -----</u>	
1955 - Fourth Quarter .....	\$ 13.1	\$ 13.1
1956 - Year .....	35.2	48.3
1957 - Year .....	44.8	93.1
1958 - Year .....	(16.0)	77.1
1959 - Year .....	59.6	136.7
<hr/>		
1960 - Second Quarter - The Peak Point ...		153.4
<hr/>		
1960 - Year .....	(13.2)	123.5

( ) Denotes red figure.

In a subsequent chapter we will estimate the amount of money which, in our opinion, TWA could and should have obtained in the form of a loan agreement in the fall of 1955.

#### XVIII. Authorization of a Flight Equipment Mortgage

We now deal with the matter of TWA borrowing, or arranging for the borrowing of, substantial amounts of money. This confronts us with the question as to what form of borrowing we would have recommended, i.e., whether by secured or unsecured loans. We would have strongly favored long term as the type of borrowing for the backbone of the program. We say this because, as already pointed out, the capital expenditure program was very large and the returns in the form of earnings from new flight equipment and other facilities would obviously have been several years off in the future. Thus, we would have wanted to avoid, insofar as practicable, short-term borrowing in the early stages of the period under review.

The three main competitors of TWA were financed during the entire period under review by unsecured loans. With \$55 million of added common stock capital put into TWA in the first half of 1955, as outlined hereinbefore, it is possible that TWA could have obtained long-term borrowed capital

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in 1955 on an unsecured basis. Nevertheless, we think that the TWA situation in 1955 indicated the adoption of a mortgage, rather than debenture issues or unsecured loans, as the appropriate form of borrowing. We say this although an air transport mortgage must be a headache to management and involves more expense (for the trustee, recording, etc.) than a debenture issue or an unsecured term loan agreement. As far back as 1945, TWA borrowed with a lien on its flight equipment (its stratocruisers). Several years prior to 1955, lenders to TWA were secured by mortgage or conditional sales agreement. Thus, lenders were accustomed to having mortgage or other form of security when lending to TWA.

We would have advised TWA in 1955 to try to obtain a loan on a debenture issue or an unsecured term loan agreement with suitable protective covenants and with contractual obligation margin requirements on some suitable basis. But we doubt that the effort would have been successful. For the purposes of this report we see no occasion to assume that our effort would have been successful. Thus, we are proceeding to design a mortgage as the instrument for TWA borrowing. And flight equipment constitutes the logical form of mortgage security.

In our opinion we would have recommended that TWA take the necessary corporate steps in the third quarter of 1955 to authorize a flight equipment mortgage along the following general lines. (\*)

Flight Equipment Mortgage

<u>To be dated:</u>	(Say) October 1, 1955.
<u>Trustee:</u>	The _____ Trust Company or Bank.
<u>Authorized Amount:</u>	Open end. Issuable in series, at such interest rates, with such maturities, sinking funds, redemption premiums, etc., as the board of directors may from time to time determine (subject to the restrictions set forth hereinafter).
<u>Security:</u>	First chattel mortgage on all Flight Equipment owned by the Company including spare engines, spare rotatable parts and expendable parts, and including after-acquired Flight Equipment and spare parts therefor.
<u>Designation:</u>	Flight Equipment Mortgage Notes, Series _____.
<u>Limitation on Amount of Flight Equipment Mortgage Notes which may be issued and outstanding at any time:</u>	The sum of 100% of cash on deposit with the Trustee in the Flight Equipment Fund plus 75% of the net book value of Flight Equipment owned by the Company, including spare engines, spare rotatable parts, and expendable parts, plus 75% of advance payments and progress payments for Flight Equipment.

(\*) We are not undertaking to design the mortgage in extenso, a task which would have been assigned to counsel.



**Flight Equipment Fund:**

To be held by the Trustee, and into which the entire proceeds of all Flight Equipment Mortgage Notes issued are to be paid. Moneys may be drawn down by the Company from time to time in aggregate amounts not in excess of the aggregate amount of advance payments, progress payments and final payments made by the Company subsequently to September 30, 1955 for Flight Equipment, including spare engines, spare rotatable parts and expendable parts. Subject, however, to the foregoing Limitation on Amount of Flight Equipment Notes which may be issued and outstanding at any time. Proceeds of claims for insurance on, and proceeds of sale of released Flight Equipment also to be paid into the Fund.

**Assignment of Flight Equipment Purchase Contracts:**

Flight Equipment Purchase Contracts to be assigned to the Trustee together with all rights of the Company thereunder, including advance and progress payments for Flight Equipment, spare engines, spare rotatable parts and expendable parts.

**Purchase Money Mortgages:**

Limited to 66-2/3% of the cost of after-acquired property other than Flight Equipment. None permitted for acquisition of Flight Equipment.

**Conditional Sales Contracts:**

Not permissible for acquisition of Flight Equipment.

**Limitation on Aggregate Consolidated Funded Debt:**

Voluntary action covenant based upon 60%, default based upon 65%, of Consolidated Net Tangible Assets.

**Leasing of Flight Equipment:**

Limited to seasonal and through-trip type of intercompany leases.

**Leasing of Property Other than Flight Equipment:**

Limited on the basis of some reasonable formula.(\*)

**Subsidiary Debt:**

Limited on the basis of some reasonable formula.(\*)

**Maintenance and Insurance:**

The usual provisions.(\*)

**Modification of Indenture:**

The usual provisions based on the consent of the holders of two thirds of the Flight Equipment Mortgage Notes.

**Consolidation, Merger or Sale:**

The usual provisions.(\*)

**Recording and Filing:**

The usual provisions.(\*)

(\*) We see no occasion for the purposes of this report, to design the formula.

**Note:** The term "expendable parts" is intended to mean only such parts as are related to Flight Equipment, and not to spare parts held in stock for use other than on Flight Equipment.

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XIX. Recommended TWA 1955 Flight Equipment Mortgage Loan

Under the above heading we will deal first with the amount of mortgage loan commitment which in our opinion TWA could and should have obtained in the fourth quarter of 1955 and, second, with the interest rate thereon.

Amount:

As of September 1955, the five-year projection of TWA's money requirements indicates a need of approximately \$153 million, with the peak point occurring in the second quarter of 1960. However, the 1955 projection is based upon a program of capital expenditures which includes only \$25 million for the cost of an as then unselected fleet of medium/long-range aircraft. On the other hand, the C&C forecast of funds generated (Exhibit: Financials - 9) used in preparing the 1955 projection of money requirements makes no allowance for revenues from disposals of piston engine equipment. In view of these uncertainties inherent in the situation as it stood in September 1955, we believe that in negotiating the long-term financing it would have been logical for the airline to make arrangements which would allow some flexibility with respect to the timing and amount of its borrowings. In our opinion TWA, in the fourth quarter of 1955, could and should have obtained mortgage loan commitments from institutional investors which would provide, in segments over about the next three years, a minimum of \$150 million and a maximum of \$170 million.

Interest Rate:

Being privately placed, our proposed 1955 TWA long-term mortgage obligations would not have received a rating by Moody's Investors Service. We believe, however, that institutional investors would have viewed such long-term obligations of TWA as coming not far from but not quite up to Baa quality.

In our opinion investing institutions, such as life insurance companies, in the fourth quarter of 1955 would have charged TWA for properly set up long-term mortgage loans a commitment fee of 1/2% per annum on the unused portion and an interest rate of 4% on the used portion. The 1955 average yield on Moody's Baa industrials was 3.47% (see Exhibit: General - 2). (Moody's does not publish yield averages for bonds rated below Baa.)

Exhibit: Financials - 13 sets forth a comparison, as of September 30, 1955, of \$170 million of 4% long-term mortgage obligations of TWA with term

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debt securities of other airlines which were either then outstanding or were arranged for at dates within reasonable proximity to September 30, 1955. The following table presents certain of the data appearing in Exhibit: Financials - 13.

	TWA	PAA	AAL	UAL	Eastern	Northwest
Type of Issue .....	Mortgage Notes	Unsecured Notes	Unsecured Notes	Debentures	Unsecured Notes	Unsecured Notes
Coupon Rate .....	4%	3-3/4%	4%	4%	3-3/4% (7)	3-3/4%
Maturity Date .....	10/1/80	3/1/80	11/1/96	2/1/81	12/15/75	12/31/62
Amount (\$000) .....	170,000	60,000	75,000	120,000	90,000	28,000
<b>Total Pro Forma Capitalization (\$000)...</b>	<b>297,400</b>	<b>187,800</b>	<b>219,300</b>	<b>258,600</b>	<b>155,400</b>	<b>56,200</b>
% Long-Term Debt .....	57.2	39.2	47.9	60.7	57.9	49.8
% Capital Stock and Surplus .....	42.8	60.8	52.1	39.3	42.1	50.2
<b>Earnings(*) and Cash Flow(**) Coverage</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>
<b>of Pro Forma Fixed Charges</b>	<b>Earn. Flow</b>	<b>Earn. Flow</b>	<b>Earn. Flow</b>	<b>Earn. Flow</b>	<b>Earn. Flow</b>	<b>Earn. Flow</b>
1950	1.7 3.1	2.6 2.7	5.9 4.8	2.0 2.4	3.0 3.7	1.1 1.6
1951	2.4 3.3	4.3 2.8	7.4 5.5	3.0 2.5	6.3 3.9	3.5 1.8
1952	2.3 4.1	3.9 2.8	6.9 6.4	3.9 3.1	5.5 6.5	3.2 1.8
1953	1.7 4.7	6.8 3.5	7.3 7.2	3.3 3.3	6.3 8.1	3.7 1.8
1954	2.3 2.1	4.2 1.5	2.2 2.2	2.8 2.5	2.9 2.2	4.8 1.9
Average - 5 years 1950-1954	2.3 4.1	4.9 3.1	6.7 6.4	3.2 3.2	5.4 6.4	3.3 1.8

(\*) Before interest and income taxes (without allowance for earnings on new funds).

(\*\*) Before interest but after current income taxes (without allowance for earnings on new funds).

(7) On first \$50 million; interest rate on remaining \$40 million was tied to yield of U.S. Treasury 3's of 1955.

( ) Denotes loss.

It will be noted that TWA's pro forma long-term debt as a percentage of its total capitalization is somewhat higher than that of PAA, AAL and Northwest, but quite comparable to that of UAL and Eastern. On the average, TWA's pro forma earnings coverage figures are below those of the other five companies, while its cash flow coverage figures are better than those of PAA, UAL and Northwest. The TWA long-term debt would be secured by a mortgage on all flight equipment, whereas the long-term debt of the other five lines was unsecured.

#### 1955 Loan Agreement

We would have recommended that TWA negotiate and enter into a loan agreement in the second half of 1955 along the following general lines. And, in our opinion, such a loan agreement could have been obtained from institutional investors.

<b>Amount:</b>	Minimum \$150 million. Maximum \$170 million.
<b>Designation:</b>	Flight Equipment Mortgage Notes, Series A.
<b>To be dated:</b>	October 1, 1955.
<b>Procedure:</b>	Private placement loan commitment with institutional investors.
<b>Price:</b>	100% plus accrued interest.



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Interest Rate: 4% per annum, payable semi-annually April 1 and October 1.

Commitment Fee: 1/2% per annum on the unused portion, payable semi-annually April 1 and October 1.

General Redemption Prices: 104 and interest, sliding downward to 100 one year prior to maturity.

Sinking Fund Redemption Price: 100 and interest.

Non-Refundability Term: 12 years.

Availability: To be designated by TWA within the following cumulative ranges:

By	Minimum	Maximum
October 1, 1956	\$ 50,000,000	\$100,000,000
October 1, 1957	100,000,000	150,000,000
April 1, 1959	150,000,000	170,000,000

Maturity: October 1, 1980.

Sinking Fund: Commencing October 1, 1965; equal annual instalments to retire 100% by maturity. Doubling up permitted annually to cumulative maximum of three annual instalments.

Security: The Flight Equipment Mortgage.

Application of Proceeds: All into the Flight Equipment Fund with the Trustee under the Flight Equipment Mortgage.

Trust Indenture Act of 1939: Upon request of any of the holders of the Notes TWA will qualify the issue under the Trust Indenture Act of 1939.

Agency Fee: 0.15%.

Estimated Other Expenses: 0.033%.

Limitation on Payment of Cash Dividends and Redemption of Stock: Limited to consolidated net income earned from September 30, 1955 onward plus some reasonable "cushion", say \$5,000,000, plus net proceeds from sale of additional stock.

SEC Registrations: On request of the holders of 66-2/3% of the Series A Notes.

Financial Reports: Quarterly balance sheets and income accounts to be delivered to each holder of the Notes. Annual statements to be audited.

Closings: Not more than one in 1955, two in each of the years 1956, 1957 and 1958, and one in 1959.

First Closing: Assumed to be on October 1, 1955 in the amount of \$50,000,000.

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Projection of TWA Funded Debt Ratio  
and Leeway for Additional Funded Debt

The following table sets forth a five-year projection as it would have appeared in September 1955 showing, as of December 31 for each of the years 1956-1960 inclusive, (a) outstanding Series A Flight Equipment Mortgage Notes as a percentage of TWA's Consolidated Net Tangible Assets, and (b) TWA's leeway for incurring additional funded indebtedness within the 60% voluntary action limitation of the Mortgage. (See Exhibit: Financials - 11.)

As of 12/31	Projected Net Tangible Assets ----- Millions -----	Series A Notes Outstanding	Series A Notes as a percent of Net Tangible Assets	Leeway for Issuance of Additional Funded Debt - Millions -
1956	\$193.9	\$ 50.0	25.8	\$165.8
1957	252.2	100.0	39.7	128.3
1958	263.4	100.0	38.0	145.1
1959	341.6	170.0(*)	49.8	87.4
1960	359.5	170.0(*)	47.3	114.2

(\*) Assuming maximum take-down of Series A Notes.

Thus, it would have appeared that TWA, on the basis of the 1955 projections, could expect to be able to take down by 1959 the maximum of \$170 million available to it from the Series A mortgage financing, while remaining comfortably within the 60% voluntary action limitation of the Mortgage.

XX. The TWA Reconstructed Situation

September 1956

For the purpose of this report we are to assume that TWA placed orders for 30 Convair 440 jet aircraft in September 1956, for delivery in 1960 (on the same terms as the order actually placed by HICO). Total price of the aircraft, including spare parts, was \$157,900,000. A downpayment of \$26,300,000 was made at the time the orders were placed, with substantially no further payments required until the third quarter of 1959. We believe it reasonable to assume that on July 1, 1956 TWA would have taken down another \$50 million of Series A Mortgage Notes to provide funds for this downpayment plus about \$22 million other expenditures for Flight Equipment to be made during the balance of 1956.

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Thus, it is appropriate for us to examine the financial posture of TWA as of September 1956, in the light of its then projected capital expenditure program, and to consider what, if any, further financing arrangements might have been indicated at that time.

TWA's reconstructed operating results during the first nine months of 1956 showed a net loss of \$500,000 and internal cash generation of \$17.5 million. (See Exhibit: Financials - 29 and 30.) The forecast of funds generated, prepared by C&C a year earlier in connection with the mortgage financing, had estimated that TWA would show net income of \$10.2 million and funds generated of \$30.2 million for the nine months ended September 30, 1956. (See Exhibit: Financials - 9.) So TWA by September 1956 was running well behind the C&C 1955 forecast. Furthermore, the new C&C forecast, prepared as of September 1956, estimated that TWA would have a net loss for the year 1957 in the amount of \$5.2 million (see Exhibit: Financials - 15).

There follows in summary form a reconstructed balance sheet of TWA as of September 30, 1956 (see Exhibit: Financials - 27).

	<u>-Millions-</u>
Net Current Assets	\$ 20.9
Total Net Property and Equipment	179.5
Flight Equipment Fund	28.1
Other Funds Restricted for Flight Equipment Purchases	0.3
Investments and Long-Term Prepayments	<u>5.3</u>
Total Tangible Assets, Less Current Liabilities	<u>\$234.1</u>
Long-Term Debt	\$100.0
Other Non-Current Liabilities	1.3
Deferred Federal Income Taxes	<u>7.7</u>
Total Non-Current Liabilities and Deferred Credits	<u>\$109.0</u>
Tangible Net Worth	\$125.1
Deferred Debits	<u>1.8</u>
Book Net Worth	<u>\$126.9</u>
Capital Stock	\$ 33.4
Capital Surplus	61.2
Retained Earnings	<u>32.3</u>
Total Stockholders' Equity	<u>\$126.9</u>
Funded Debt as % of Net Tangible Assets	43.0%

It will be noted that, on the reconstructed basis, by September 30, 1956 TWA would have taken down \$100 million of the \$170 million (maximum) available under the 1955 mortgage financing. It should also be noted that

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the September 30, 1956 reconstructed balance sheet is after giving effect to the down payment of \$26.3 million required on the placing of the Convair order. Thus, at that date TWA had \$70 million of committed long-term funds with which to meet its then indicated money requirements (subject, of course to its staying within the required ratios under the Mortgage). Working capital stood at \$20.9 million as compared with the desired minimum of \$10.0 million.

TWA's capital expenditure program, as projected by PWCo as of September 30, 1956, is set forth in summarized form in the following tabulation.

(See Exhibit: Financials - 14.)

	<u>Property and Equipment</u>			<u>Deferred Debits</u>	<u>Total</u>
	<u>Jet Fleet</u>	<u>Piston Fleet</u>	<u>Ground and Nonoperating</u>		
	----- Millions -----				
1956 - Fourth Quarter	\$ 4.9	\$ 3.8	\$ 1.3	\$ 0.1	\$ 10.1
1957 - Year	19.9	55.7	9.9	2.1	87.6
1958 - Year	24.0	2.2	6.6	0.7	33.5
1959 - Year	116.4	0.1	7.4	(0.5)	123.4
1960 - Year	144.3	-	8.0	0.5	152.8
1961 - Year	<u>4.8</u>	<u>(2.2)</u>	<u>6.2</u>	<u>(0.3)</u>	<u>8.5</u>
Total	<u>\$314.3</u>	<u>\$ 59.6</u>	<u>\$ 39.4</u>	<u>\$ 2.6</u>	<u>\$ 415.9</u>

( ) Denotes red figure.

With respect to the foregoing projection it should be noted that:

(1) It includes provision for the cost of all piston-driven aircraft then on order and for advance, progress and final payments for the 33 Boeing and the 30 Convair jet transports for delivery prior to the end of 1960. (The figure of \$4.8 million for jet fleet in 1961 consists principally of expenditures for rotatable parts for these Boeing and Convair jets.) And -

(2) The figures are over and above the \$61.3 million advance payments for aircraft and engines which are incorporated as a part of the book value of Flight Equipment in the reconstructed balance sheet as of September 30, 1956.

Exhibit: Financials - 16 shows a five-year projection of TWA's money requirements as they would have appeared in September 1956. The following is a description of the basis on which Exhibit: Financials - 16 has been prepared.

(1) Figures for net income (loss), deferred taxes, and for depreciation and amortization, are taken from the C&C forecast of funds generated as of September 1956. (See Exhibit: Financials - 15.) This C&C forecast is based on timely acquisition (meaning prior to December 31, 1960) of the 33 Boeing and the 30 Convair jet transports.

(2) It (the projection of money requirements) makes no allowance for the sale of property.

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(3) Like all projections of money requirements included in this report, it makes no allowance for the cost of required new capital such as interest, commitment fees, agency fees, etc., although it does allow for such costs with respect to the Series A Flight Equipment Notes.

(4) It provides for the capital expenditure program as projected by PwCo as of September 1956. And -

(5) It starts with the amount of reconstructed TWA working capital as of September 30, 1956 and provides for a desirable working capital of \$10 million excluding Flight Equipment Expendable Parts.

The projection shows, on the foregoing basis, the amount of new money (meaning from outside sources) required quarter by quarter and cumulatively from September 30, 1956. The following tabulation sets forth the figures in summarized year-by-year form.

TWA  
Projection of Money Requirements

as of September 1956

	<u>By Period</u>	<u>Cumulative from September 30, 1956</u>
	-----Millions-----	
1956 - Fourth Quarter .....	\$ (4.2)	\$ (4.2)
1957 - Year .....	65.2	61.0
1958 - Year .....	(3.5)	57.5
1959 - Year .....	78.6	136.1
<hr/>		
1960 - Third Quarter - The Peak Point ..		233.5
<hr/>		
1960 - Year .....	89.6	225.7
1961 - Year .....	(79.9)	145.8

( ) Denotes red figure.

Thus, the September 1956 projections indicated a peak requirement, by the 1960 third quarter, of \$233.5 million, which was \$163.5 million more than the \$70 million unused portion of the 1955 mortgage commitment. The projections indicated, however, that the availability of the \$70 million commitment should enable TWA to get by without additional outside financing until about the first quarter of 1959.

Exhibit: Financials-17 is a projection, as of September 1956, of TWA's "leeway" for incurrence of additional funded debt under the restrictive provision of the Flight Equipment Mortgage. The projection indicates that in the third quarter of 1960, the period of expected peak money requirement, TWA could not have outstanding more than \$64.1 million of additional funded debt.



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(3) Like all projections of money requirements included in this report, it makes no allowance for the cost of required new capital such as interest, commitment fees, agency fees, etc., although it does allow for such costs with respect to the Series A Flight Equipment Notes.

(4) It provides for the capital expenditure program as projected by FWCs as of September 1955. And -

(5) It starts with the amount of reconstructed TWA working capital as of September 30, 1956 and provides for a desirable working capital of \$10 million excluding Flight Equipment Expendable Parts.

The projection shows, on the foregoing basis, the amount of new money (meaning from outside sources) required quarter by quarter and cumulatively from September 30, 1956. The following tabulation sets forth the figures in summarized year-by-year form.

<u>TWA</u> <u>Projection of Money Requirements</u> <u>as of September 1956</u>		
	<u>By Period</u>	<u>Cumulative from September 30, 1956</u>
	-----	-----
	Millions	Millions
1956 - Fourth Quarter .....	\$ (4.2)	\$ (4.2)
1957 - Year .....	65.2	61.0
1958 - Year .....	(3.5)	57.5
1959 - Year .....	78.6	136.1
1960 - Year .....	89.6	225.7
<hr/>		
1961 - First Quarter - The Peak Point .....		227.9
<hr/>		
1961 - Year .....	(79.9)	145.8

( ) Denotes red figure.

Thus, the September 1956 projections indicated a peak requirement, by the 1961 first quarter, of \$227.9 million, which was \$157.9 million more than the \$70 million unused portion of the 1955 mortgage commitment. The projections indicated, however, that the availability of the \$70 million commitment should enable TWA to get by without additional outside financing until about mid-1959.

Exhibit: Financials - 17 is a projection, as of September 1956, of TWA's "leeway" for incurrence of additional funded debt under the restrictive provision of the Flight Equipment Mortgage. The projection indicates that in the first quarter of 1961, the period of expected peak money requirement, TWA could not have outstanding more than \$41.0 million of additional funded debt

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 (over and above the \$170,000,000 Series A Notes) without breaching the 60% funded debt to net tangible assets voluntary action covenant of the Mortgage. Thus, in September 1956 it would have been clear that further financing to meet the peak need by the third quarter of 1960 would have to include the sale of some form of junior security.

In summary, then, TWA's financial posture at September 30, 1956 was about as follows: It had experienced sizable operating losses during the nine-month period then ended, and C&C was forecasting further losses in 1957. TWA had a projected peak requirement for \$163.5 million in new outside funds (over and above what had been provided for in the 1955 mortgage financing) and it appeared that some form of junior security would have to be included in the financing of this requirement. But the new money did not appear to be needed before the first quarter of 1959, almost 2-1/2 years hence.

We conclude that under the circumstances prevailing in September 1956 we would have recommended to TWA that it not attempt, at that time, to formalize further financing arrangements even though all indications were that it would have to do so later. We believe that TWA would have held conversations with its major institutional lenders to advise them of the enlargement of its projected money requirements, indicating (a) that it would be approaching them at a later date to discuss further borrowing arrangements, and (b) that it recognized the indicated need for junior financing prior to or in conjunction therewith.

It would not have been practical, in September 1956, to attempt to pinpoint a target date for a financing two years or so away. We believe that it would have been logical to plan in terms of a financing sometime in the latter part of 1958 or early in 1959. However, since the junior financing would doubtless involve the sale of common stock, either directly or through the use of a convertible security or warrants, we believe that TWA and we, as their investment bankers, would have been keeping a weather eye on the market for airline securities with a view toward a possible earlier financing should stock market conditions permit.

#### XXI. Leased Aircraft - 1957

TWA subleased five Lockheed L1049H aircraft which HTCo leased partly from California Eastern Aviation and partly from Resort Airlines. (\*) Sublease

(\*) We say "partly" because a change in ownership of one of the aircraft took place during the term of the sublease.



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(over and above the \$170,000,000 Series A Notes) without breaching the 60% funded debt to net tangible assets voluntary action covenant of the Mortgage. Thus, in September 1956 it would have been clear that further financing to meet the peak need by 1961 would have to include the sale of some form of junior security.

In summary, then, TWA's financial posture at September 30, 1956 was about as follows. It had experienced sizable operating losses during the nine-month period then ended, and C&C was forecasting further losses in 1957. TWA had a projected peak requirement for \$157.9 million in new outside funds (over and above what had been provided for in the 1955 mortgage financing) and it appeared that some form of junior security would have to be included in the financing of this requirement. But the new money did not appear to be needed before mid-1959, over 2-1/2 years hence.

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#### XXI. Leased Aircraft - 1957

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payments began August 14, 1957. The aircraft were returned (one was destroyed) on various dates from January 10, 1961 to November 18, 1961, when the sublease was terminated. None of the aircraft was purchased by TWA. Lease payments were on the following basis.

For two of the aircraft - \$40,000 per month per aircraft up to October 31, 1958 and \$34,367 per month per aircraft thereafter, plus \$16,066 per month for related spare parts for the two aircraft.

For the three other aircraft - \$40,000 per month per aircraft plus \$17,875 per month for related spare parts for all three aircraft.

\$15.00 per engine (including spare engines) for each hour since last overhaul at time returned on termination of lease, less number of hours since overhaul on delivery at commencement of lease.

\$12.50 per hour since last major overhaul on termination less number of hours flown between overhaul and commencement of lease.

The sublease was on a "net" basis, i.e., TWA paid maintenance and insurance costs. We are advised that monthly and annual rentals worked out at the following amounts.

		<u>Monthly</u>	<u>Annual</u>
<u>Aircraft:</u>			
Nos. 1251 and 1252	@ \$34,367	\$ 68,734	\$ 824,808
Nos. 1253, 1254 and 1255	@ 40,000	<u>120,000</u>	<u>1,440,000</u>
Total Aircraft		<u>\$188,734</u>	<u>\$2,264,808</u>
<u>Spare Parts:</u>			
2 aircraft		\$ 16,066	\$ 192,792
3 aircraft		<u>17,875</u>	<u>214,500</u>
Total Spare Parts		<u>\$ 33,941</u>	<u>\$ 407,292</u>
Total Rental		<u>\$222,675</u>	<u>\$2,672,100</u>

In this report we are assuming that TWA had the identical sublease, or a direct lease on identical terms, from one or another outside party.

We realize that the Flight Equipment Mortgage has a provision against leasing of Flight Equipment which would have required TWA to obtain the necessary consents of the holders of the Series A Notes prior to entering into leasing arrangements with respect to the five Lockheed L1049H aircraft. We are assuming, for purposes of this report, that TWA could have obtained such consents.

#### XXII. The TWA Reconstructed Situation

##### 1957 Through Mid-1958

We believe it reasonable to assume that TWA would have borrowed another \$50 million under the 1955 Loan Agreement on April 1, 1957, and that on January 1, 1958 it would have borrowed the \$20 million then remaining

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available to it under such Loan Agreement. Thus, the takedowns under the 1955 Loan Agreement may be summarized as follows:

October 1, 1955	\$ 50 million
July 1, 1956	50 "
April 1, 1957	50 "
January 1, 1958	<u>20</u> "
Total	\$170 million

Reconstructed generation of funds from internal sources for the 12 months ended September 30, 1957 turned out to be \$13.9 million higher than forecast by C&C in September 1956 (including \$3.0 million from plane sales which had not been allowed for in the September 1956 C&C forecast). However, in the last quarter of 1957 internal cash flow (reconstructed) was \$4.8 million lower than the forecast for that quarter. The cash flow continued to lag behind the forecast in each of the next two quarters. The cumulative "lag" for the period from September 30, 1956 to June 30, 1958 was \$3.5 million. (See Exhibits: Financials 15, 29 and 30.)

TWA committed itself, in the fourth quarter of 1957, to take over the purchase contract for four L1649A piston aircraft from Linee Aeree Italiane (LAI). Historically, TWA also committed itself in the fourth quarter of 1957 to purchase four L1049H piston aircraft. For the purposes of this report, Cahill, Gordon, Reindel & Ohl have instructed us to assume that these commitments were entered into, just as they were historically. Expenditures for these eight piston aircraft, however, were not included in the FWCo Projections of Capital Expenditures as of September 1955 and September 1956 because they were not foreseen as of those dates. Net cash expenditures by TWA for these aircraft totaled \$17.3 million and were made as follows:

<u>Year</u>	<u>Quarter</u>	<u>Four</u> <u>L1649As</u>	<u>Four</u> <u>L1049Hs</u>	<u>Total</u> <u>Expenditures</u>
		<u>millions</u>		
1957	4	\$ 7.6(*)	\$ 2.2	\$ 9.8
1958	1	-	-	-
1958	2	0.9	6.5	7.4
1958	3	-	0.1	0.1
Total		<u>\$ 8.5(*)</u>	<u>\$ 8.8</u>	<u>\$17.3</u>

(\*) Net of proceeds from sale of LAI stock.

We believe it reasonable to assume that payment for these aircraft would have been provided out of the final takedown of \$20 million Series A Mortgage Notes on January 1, 1958.

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As a result of the foregoing factors, TWA would have been aware, by mid-1958, that funds required from outside sources to meet projected capital expenditures would be larger than indicated by the September 1956 projection. Timing of the money requirement had not changed, however. It appeared that the airline should be able to meet its scheduled progress payments on the jets, and its other capital requirements, without obtaining new funds from outside sources until the spring or summer of 1959.

TWA, however, was on "thin ice" with respect to the funded debt restrictions of the Flight Equipment Mortgage. Exhibit: Financials - 27 indicates that throughout the first half of 1958 TWA's reconstructed funded debt as a percentage of net tangible assets would have hovered right around the 60% figure set forth in the voluntary action covenant of the funded debt limitation. It did not appear that there was any immediate danger of reaching the 65% default level.

Under the circumstances outlined above it is probable that TWA would have given consideration to doing in 1958 some portion of the junior financing which had tentatively been scheduled for 1959, the purpose of such a step being to provide some additional "cushion" beneath its outstanding funded debt and thereby avoid the possibility of default under the 65% provision of the Flight Equipment Mortgage. Since junior financing would undoubtedly involve the issuance of common stock in one form or another, it is appropriate that we examine the market conditions for TWA's shares and for airline stocks generally which prevailed in early 1958.

The following tabulation shows a comparison of the market prices of TWA stock with the Standard & Poor's Index of Air Transport Stocks. It also shows the AIMV of TWA and the book value of TWA shares.

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**TWA Stock Market and Related Figures**

	S. & P.'s Index of Air Transport Stocks	Market Price per share	TWA - Historical		
			No. of Shares Outstanding End of Month	AIMV (Approx.)	Book Value per share End of Month
			----- (000 omitted) -----		
December 31, 1953	15.80	12-7/8	3,333	\$42,900	\$17.04
December 31, 1954	27.93	29-3/4	3,337	99,300	20.14
December 31, 1955	31.19	25-1/4	3,337	84,300	21.76
December 31, 1956	29.97	19	3,337	63,400	21.07
December 31, 1957	18.45	10-1/4	6,674(*)	68,400	16.77
January 1958	20.89	12-1/2	6,674	83,400	
February 1958	21.57	12-1/4	6,674	81,800	
March 1958	21.43	12-3/4	6,674	85,100	15.09
April 1958	20.28	12-1/8	6,674	80,900	
May 1958	21.08	12-1/2	6,674	83,400	
June 1958	22.52	12-1/4	6,674	81,800	14.96
Percent Advance (Decline):					
Dec. 1953 - Dec. 1957	17%	(20)%		59%	
Dec. 1957 - June 1958	22%	20%		20%	

(\*) 3,337,036 shares issued and sold in 1957.

**Note:** Figures for Standard & Poor's Index are monthly averages of weekly price indexes. (See Exhibit: General - 6.)  
TWA stock prices are month end closing prices. (See Exhibit: Trans World - 9.)

It will be noted that S. & P.'s Index of Air Transport Stocks had been declining throughout 1956 and 1957, and in March 1958 stood at 21.43, a little above the low point of 18.45 reached in December 1957. The price of TWA common had also declined steadily since reaching a high of 31-5/8 in mid-1955. The closing price of TWA common at the end of March 1958 was 12-3/4 as compared with a per share book value (historical) of \$15.09 as of the same date.

The following excerpts from Moody's Stock Survey may be considered indicative of what investors were being advised as regards airline stocks in the first half of 1958.

In its February 3, 1958 issue, the Survey says:

"Airlines have said that the 6.6% temporary passenger-fare increase approved in January by the CAB is inadequate. Nevertheless it will almost certainly result in higher net income in 1958 for most - and perhaps all - of the companies.

"For example, we estimate that the increase alone would mean additional net income of about \$1.15 a share for American Airlines, \$2.90 for Eastern Air Lines, 85¢ for TWA, and \$2.25 for United. These figures may be compared with our estimates of the same companies' earnings in the difficult year of 1957: American, \$1.30; Eastern, \$2.50; TWA, a 75¢ deficit; and United, \$2.35. \* \* \* \* \*

"Airlines' very large orders for new planes, especially costly jets, may leave them with difficult financing problems in spite of this fare rise. Thus we do not feel that the CAB action is sufficient reason for general bullishness toward airline stocks.



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"At current depressed prices, they appear worth holding as long-term speculations. And we think that the per-share impact of the new rates would be large enough for Delta (20 $\frac{1}{2}$ ), Eastern (35) and United (26) to make their stocks good values, and worth accumulating as speculations for later appreciation."

An article entitled "Selected Speculations in Airline Stocks", in the June 30, 1958 issue of Moody's Stock Survey says:

"For more than two years, airline earnings have worked steadily downward, and prices of domestic trunkline stocks have reflected this. Most look well deflated in spite of a moderate recovery after this year's 6.6% fare increase. Expectations for 1958 arouse little enthusiasm in us for airline stocks, but we see reasons for a good recovery in 1959 - and the market should begin to anticipate this.

"Though airline traffic has increased fast, these can't be called growth stocks. Instead, the speculative equities are primarily vehicles for short-term trading. On the year-ahead prospect, we recommend Eastern Air Lines and Pan American World Airways among the larger carriers, \* \* \* \*

"Jets and turboprops will greatly improve riding qualities, helping business. Thus another round of orders for such planes (the first began in 1955) seems ahead, and full conversion will evidently be achieved no later than 1964. \* \* \* \* We figure that by the end of 1963 every carrier reviewed here will have debt (including capitalized rentals) above 60% of total capitalization.

"No line dares to stay out of this competition, though industry finances are far from comfortable. Several lines - most probably Capital, Delta, Northwest and TWA, may well have to do more equity financing.  
\* \* \* \* \*

So, throughout the first half of 1958 TWA's shares, and the shares of its principal competitors, were selling at prices only slightly recovered from their then recent lows. But the market generally seemed to be expecting an improved performance from airline shares during the forthcoming months. Since TWA's period of outside money need still appeared to be at least twelve months away, we believe that we would have recommended that TWA adhere to its plans for a financing in 1959 rather than attempt to accelerate part of the program. It appeared to be a good business risk that market conditions for an equity offering by TWA (which would clearly be the cornerstone of the financing) would be better by mid-1959 than they were in mid-1958.

Thus, commencing in the summer of 1958, we believe that TWA, in consultation with its lawyers, accountants, investment bankers, institutional lenders, etc., would have been engaged in the task of designing and preparing for a major financing in the spring or summer of 1959, involving the sale of both senior and junior securities.



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XXIII. Comparative Data  
TWA and Its Competitors

Early 1959

We now proceed to present various earnings and other data relating to TWA and its principal competitors which would have been of interest to prospective investors in the early part of 1959.

Comparative Earnings  
1954-1958

The tabulation on the following page shows the results of TWA operations (historical and reconstructed) year by year, in comparison with its three main competitors in the five-year period 1954-1958, inclusive. (See Exhibit: Comparisons - 4 and Exhibit: Financials - 29.)

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	T W A				
	Historical	Recon- structed	PAA	AAL	UAL
	(Millions)				
<u>Total Operating Revenue:</u>					
1954 .....	\$ 203.7	\$ 203.7	\$ 213.5	\$ 214.8	\$ 200.7
1955 .....	217.4	217.4	238.1	260.8	235.6
1956 .....	240.4	240.4	288.5	291.8	262.8
1957 .....	263.7	263.7	312.7	305.9	281.9
1958 .....	284.8	284.8	313.2	317.2	316.8
Total .....	<u>\$1,210.0</u>	<u>\$1,210.0</u>	<u>\$1,366.0</u>	<u>\$1,390.5</u>	<u>\$1,297.8</u>
<u>Net Operating Income (Loss):</u>					
1954 .....	\$ 22.7	\$ 22.7	\$ 15.0	\$ 20.9	\$ 21.9
1955 .....	11.5	11.5	13.0	39.3	24.7
1956 .....	(4.1)	(4.1)	23.2	37.0	24.2
1957 .....	(4.5)	(4.4)	14.3	18.0	12.3
1958 .....	(0.4)	(0.3)	7.2	26.3	30.6
Total .....	<u>\$ 25.2</u>	<u>\$ 25.4</u>	<u>\$ 72.7</u>	<u>\$ 141.5</u>	<u>\$ 113.7</u>
<u>Net Income (Loss):</u>					
1954 .....	\$ 10.3	\$ 10.3	\$ 9.7	\$ 11.4	\$ 9.6
1955 .....	5.4	4.8	10.7	18.6	11.2
1956 .....	(2.3)	(2.7)	14.7	19.6	14.7
1957 .....	(1.6)	(1.8)	8.1	10.9	7.9
1958 .....	(1.8)	(1.7)	5.1	16.1	14.3
Total .....	<u>\$ 10.0</u>	<u>\$ 8.9</u>	<u>\$ 48.3</u>	<u>\$ 76.6</u>	<u>\$ 57.7</u>
<u>Revenue Airplane Miles Flown:</u>					
1954 .....	89.1	89.1	67.3	99.7	98.3
1955 .....	97.2	97.2	80.1	121.7	110.0
1956 .....	107.5	107.5	94.8	133.4	121.7
1957 .....	118.6	118.6	102.2	143.1	130.4
1958 .....	117.8	117.8	103.9	134.4	135.5
Total .....	<u>530.2</u>	<u>530.2</u>	<u>448.3</u>	<u>632.3</u>	<u>595.9</u>
<u>Available Seat Miles:</u>					
1954 .....	4,768	4,768	3,713	5,095	5,010
1955 .....	5,405	5,405	4,327	6,409	5,892
1956 .....	6,202	6,202	5,128	7,161	6,734
1957 .....	6,985	6,985	5,784	7,926	7,537
1958 .....	7,256	7,256	6,033	7,645	8,090
Total .....	<u>30,616</u>	<u>30,616</u>	<u>24,985</u>	<u>34,236</u>	<u>33,263</u>
<u>For the Five Years 1954-1958</u>					
<u>Net Operating Income:</u>					
Per Revenue Airplane Mile	c 4.75	4.79	16.22	22.39	19.08
Per Million Available Seat Miles	\$ 823.	830.	2910.	4135.	3418.
<u>For the One Year - 1958</u>					
<u>Net Operating Income (Loss):</u>					
Per Revenue Airplane Mile	c (0.32)	(0.28)	6.97	19.60	22.55
Per Million Available Seat Miles	\$ (52.)	(41.)	1199.	3446.	3777.

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Operating results of each of the four lines during the five-year period showed the effects of the high costs of preparation for the introduction of jet equipment. TWA, however, with losses from operations in three out of the five years, turned in by far the poorest performance of the four lines.

**TWA Reconstructed  
Income Account  
1954 - 1958**

The following tabulation shows the TWA income account (reconstructed) in more detail for the five years 1954-1958 inclusive. (See Exhibits: Financials - 2.) and 29.)

	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>Aggregate 1954-1958</u>	<u>Annual Average</u>
	(millions)						
Gain(Loss) from Operations before deprec. and amort.	\$ 44.2	\$ 31.8	\$ 16.4	\$ 22.3	\$ 31.2	\$ 145.9	\$ 29.2
Depreciation and Amortization Charges	<u>21.5</u>	<u>20.3</u>	<u>20.5</u>	<u>26.7</u>	<u>31.5</u>	<u>120.5</u>	<u>24.1</u>
Gain(Loss) from Operations	\$ 22.7	\$ 11.5	\$ (4.1)	\$ (4.4)	\$ (0.3)	\$ 25.4	\$ 5.1
Gain(Loss) on Sale of Property and Equipment	-	0.6	0.6	1.2	0.7	3.1	0.6
Other Income Credits(Charges) - Net	<u>0.1</u>	<u>0.6</u>	<u>0.7</u>	<u>2.2</u>	<u>0.5</u>	<u>4.1</u>	<u>0.8</u>
Income(Loss) before Interest and Income Taxes	\$ 22.8	\$ 12.7	\$ (2.8)	\$ (1.0)	\$ 0.9	\$ 32.6	\$ 6.5
Net Interest Expense	<u>1.5</u>	<u>2.6</u>	<u>2.7</u>	<u>3.3</u>	<u>4.0</u>	<u>14.1</u>	<u>2.8</u>
Income(Loss) before Income Taxes	\$ 21.3	\$ 10.1	\$ (5.5)	\$ (4.3)	\$ (3.1)	\$ 18.5	\$ 3.7
Income Taxes	<u>11.0</u>	<u>5.3</u>	<u>(2.8)</u>	<u>(2.5)</u>	<u>(1.4)</u>	<u>9.6</u>	<u>1.9</u>
Net Income (Loss)	<u>\$ 10.3</u>	<u>\$ 4.8</u>	<u>\$ (2.7)</u>	<u>\$ (1.8)</u>	<u>\$ (1.7)</u>	<u>\$ 8.9</u>	<u>\$ 1.8</u>
Net Income(Loss) per share	\$ 3.10	\$ 0.72	\$ (0.40)	\$ (0.27)	\$ (0.25)		\$ 0.27
Shares outstanding - end of year (000)	3,337	6,673	6,674	6,674	6,674		6,674

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#### TWA News Releases

The following are brief summaries of the two TWA news releases put out in the first half of 1959.

#### April 1, 1959

Increased revenues and decreased expenses per revenue ton mile produced a \$10,196,000 operating profit for TWA during the second half of 1958 as compared with an operating loss of \$1,305,000 for the 1957 period \* \* \* \* \*

\* \* \* \* \*

Despite an operating loss of \$10,571,000 for the first six months of 1958 and a costly 17-day strike in the final half, the full year operating loss was reduced to \$375,000 compared with operating losses of \$4,539,000 and \$4,131,000 for the years 1957 and 1956 \* \* \* \* \*

\* \* \* \* \*

The summary:

	<u>1958</u>	<u>1957</u>
	-----\$000-----	
Operating Revenues	284,841	263,664
Net Loss	1,764	1,558
Per Share Loss (*)	26¢	23¢

(\*) Based on 6,674,155 shares  
outstanding on December 31, 1958

#### April 23, 1959

Paced by record operating revenues for the quarter ending March 31, TWA reduced its net loss after taxes for the period to \$3,778,000 from \$10,401,000 in the same period last year \* \* \* \* \*

The first quarter results include an increase in depreciation charges of \$1,722,000 due to a new policy effective January 1, 1959 which assigned lower residual values to latest type aircraft and engines.

\* \* \* \* \*

The summary:

	<u>1959</u>	<u>1958</u>
	-----\$000-----	
Total Revenues	70,638	59,544
Net Loss after taxes	3,778(*)	10,401(†)

(\*) Figures include income tax  
credit adjustment of \$379,000  
in 1959 and \$662,000 in 1958.

#### Interim Earnings - Early 1959 TWA and its Competitors

The following are summaries of items appearing in Moody's Transportation Manual - current section from January 1, 1959 to June 30, 1959, in regard to TWA and its three main competitors. The date preceding each item is the date of the Moody's supplement in which the item appeared.

March 24, 1959

## Earnings, January (CAB report):

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 62,555	\$ d3,646,000

April 3, 1959

## Earnings, years ended December 31:

	<u>1958</u>	<u>1957</u>
Operating revenue .....	\$284,840,956	\$263,664,554
Net loss .....	1,764,381	1,558,446
Earned per share .....	d\$0.26	d\$0.23
No. of shares .....	6,674,155	6,674,155

April 14, 1959

## Earnings, February (CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 2,898,118	\$ 4,811,000
Earned per share .....	d\$0.43	d\$0.72
No. of shares .....	6,674,155	6,674,113

May 22, 1959

First half profit expected in place of \$11,900,000 loss year ago. Company had profit in April though loss was expected. Load factors in jets are averaging 97%.

May 26, 1959Earnings, 3 months to March 31  
(CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 3,778,095	\$ 10,401,000
Earned per share .....	d\$0.57	d\$1.56
No. of shares .....	6,674,155	6,674,113

June 2, 1959

## Earnings, March:

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 942,000	\$ 2,606,000
Earned per share .....	d\$0.14	d\$0.39
No. of shares .....	6,674,155	6,674,113

June 12, 1959

## Earnings, April (CAB report):

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 735,273	\$ d1,882,000
Earned per share .....	\$0.11	d\$0.28



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P A A

March 20, 1959

Earnings, January (CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 820,000	\$ 1,405,000

April 21, 1959

Earnings, February (CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 1,319,000	\$ 1,425,000
Earned per share .....	d\$0.22	d\$0.23

2 months to February 28:

Net loss .....	\$ 2,138,000	\$ 2,830,000
Earned per share .....	d\$0.33	d\$0.46

May 1, 1959

Income Account, years ended  
December 31:

	<u>1958</u>	<u>1957</u>
Net Income .....	\$ 5,090,000	\$ 8,241,000

May 22, 1959

Earnings, three months to March 31  
(CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 2,498,586	\$ 3,360,451
Earned per share .....	d\$0.38	d\$0.55
No. of shares .....	6,573,348	6,136,120

June 12, 1959

Earnings, April (CAB report):

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 364,000	\$ 522,000
Earned per share .....	d\$0.06	d\$0.09

4 months to April 30:

Net loss .....	\$ 2,863,000	\$ 3,883,000
Earned per share .....	d\$0.44	d\$0.63
No. of shares .....	6,573,348	6,136,120



AALJanuary 16, 1959

Proposed equity financing in 1959 may be undertaken despite completion of financing for equipment program, in order to increase equity base and to take advantage of market conditions, according to W. J. Hogan, executive vice-president-finance.

March 20, 1959Consolidated Earnings, years ended  
December 31:

	<u>1958</u>	<u>1957</u>
Net after taxes .....	\$ 16,080,252	\$ 10,885,877
Earnings, common share .....	\$1.97	\$1.31

April 10, 1959

## Earnings, January (CAB report):

	<u>1959</u>	<u>1958</u>
Net profit .....	\$ 41,193,398	\$ 625,434
Earnings, common share .....	\$0.20	\$0.07

Consolidated Income Account,  
years ended December 31:

	<u>1958</u>	<u>1957</u>
Net profit .....	\$ 16,080,252	\$ 10,885,877

## Five-Year Common Stock Record (in \$):

	<u>1958</u>	<u>1957</u>	<u>1956</u>	<u>1955</u>	<u>1954</u>
Earnings per share ...	0)1.94	0)1.38	0)2.40	0)2.32	0)1.51
Dividends .....	1.00	1.00	1.00	.80	.60
High .....	25-3/4	24-1/8	26-1/4	29-1/8	22-5/8
Low .....	14-3/8	14	22	20-1/2	11-1/2

Number of shares: 1958, 8,011,048; 1957, 7,898,192;  
1956, 7,888,376; 1955, 7,873,362;  
1954, 6,636,245.

(1) Based on average number of shares would be: 1958, \$1.97;  
1957, \$1.31; 1956, \$2.44; 1955, \$2.42; 1954, \$1.54.

May 21, 1959

## Consolidated Earnings, March:

	<u>1959</u>	<u>1958</u>
Net profit .....	\$ 868,087	\$ 1,143,651

## 3 months to March 31:

Earnings, common share .....	\$0.12	\$0.19
No. of common shares .....	8,107,454	7,891,792

May 26, 1959

## Consolidated Earnings, April:

	<u>1959</u>	<u>1958</u>
Net profit .....	\$ 2,131,982	\$ 1,123,712

## 4 months to April 30:

Net profit .....	\$ 1,395,498	\$ 2,908,672
Earnings, common share .....	\$0.15	\$0.33

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A A L  
(continued)

June 26, 1959

Consolidated Earnings, May:

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 2,047,121	\$ 1,418,220

5 months to May 31: .....

Net profit .....	\$ 3,504,132	\$ 4,326,892
Earnings, common share	\$0.41	\$0.51

Private financing arranged through Lazard Freres & Co., New York, included sale of \$30,000,000 5% notes due 1996, and \$40,000,000 5% subordinated convertible debentures due 1985. Proceeds for general corporate purposes, including acquisition of jet aircraft.

U A L

March 10, 1959

Earnings, January (sys.):

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 1,074,801	\$ 4284,408
Earnings, common share ....	\$1.00	d\$0.07
Earnings as corrected; see below	\$0.29	d\$0.08

March 13, 1959

Earned Per Share - Correction: For month of January, earned per share was \$0.29 in 1959 and d\$0.08 in 1958, not as reported \* \* \* \*.

Debentures Sold: On February 27, \$39,600,000 additional series D 4s, due 1981, were taken down. This was fourth and last installment under contracts dated December 22, 1955, and brought total amount of series D debentures sold to \$120,000,000. \* \* \* \* \*

March 17, 1959

Income Account, years ended  
December 31:

	<u>1958</u>	<u>1957</u>
Net profit .....	\$ 14,300,262	\$ 7,888,303

Five-Year Common Stock Record (in \$):

	<u>1958</u>	<u>1957</u>	<u>1956</u>	<u>1955</u>	<u>1954</u>
Earnings per share .....	3.88	2.28	4.55	3.35	3.52

April 7, 1959

Earnings, February:

	<u>1959</u>	<u>1958</u>
Net loss .....	\$ 467,060	\$ 1,139,722
Earnings, common share ....	d\$0.13	d\$0.33

2 months to February 28:

Net profit .....	\$ 607,741	\$ d1,424,130
Earnings, common share ....	\$0.16	d\$0.41

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U A L  
(continued)

May 5, 1959Sales and Earnings, three months  
to March 31:

	<u>1959</u>	<u>1958</u>
Net after taxes.....	\$ 1,851,710	\$ d384,593
Earned per share .....	\$0.50	d\$0.11

May 12, 1959

## Earnings, March:

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 1,243,969	\$ 1,039,537
Earnings, common share .....	\$0.34	\$0.30

## 3 months to March 31:

Net income .....	\$ 1,851,710	\$ d384,593
Earnings, common share .....	\$0.50	d\$0.11

June 5, 1959

## Earnings (system), April:

	<u>1959</u>	<u>1958</u>
Net income .....	\$ 554,821	\$ 1,367,280
Earnings, common share .....	\$0.15	\$0.39

## 4 months to April 30:

Net income .....	\$ 2,406,531	\$ 982,687
Earnings, common share .....	\$0.65	\$0.28

Dividend Records -  
TWA and its Competitors  
1958-1959

## In 1958 and 1959:

TWA paid no dividends.

PAA was paying regular quarterly cash dividends of 20¢ per share (80¢ annual rate).

AAL was paying regular quarterly cash dividends of 25¢ per share (\$1.00 annual rate).

UAL was paying regular quarterly cash dividends of 12.5¢ per share plus semi-annual 3% stock dividends (annual rate - 50¢ in cash and 6% in stock).

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#### XXV. The General Stock Market Situation

##### 1958 and the First Half of 1959

The stock market in general was strong and advancing throughout 1958 and the first half of 1959. The Dow-Jones Industrials were as follows:

	High	Low
January 1958 .....	451	439
June 1958 .....	79	466
January 1959 .....	598	583
June 1959 .....	644	618
Percent Advance Jan. 1958 - June 1959	43%	41%
Percent Advance Jan. 1959 - June 1959	8%	6%

The market quotations for the common stocks of TWA's main competitors, as reported by the Bank and Quotation Record, were as follows. (TWA will be dealt with separately.)

	PAZ		AAL		UAL (*)	
	High	Low	High	Low	High	Low
January 1958	15-3/8	12-3/4	17-7/8	14-3/8	27-1/8	21-1/4
June 1958	17	15-3/4	20-1/4	18-5/8	27-7/8	26-1/8
January 1959	30-1/8	22-1/8	30-3/4	24-1/8	37-3/4	30-7/8
February 1959	28-3/4	25-3/4	30-1/2	27-3/4	36-7/8	33
March 1959	30-5/8	26-3/4	32-3/8	28-1/4	38-1/8	34-1/8
April 1959	35-1/4	30	33-3/8	29-1/4	40-3/8	35-1/4
May 1959	33	29-1/8	31-3/8	27-5/8	40-7/8	36-1/8
June 1959	30-1/8	27-1/8	31-1/4	27-5/8	41-3/8	35-3/8
Percent Advance -						
Jan. 1958 - June 1959	96%	113%	75%	92%	53%	66%
Jan. 1959 - June 1959	-	23%	2%	15%	10%	115%

(\*) UAL prices are not adjusted to reflect retroactively the 3% stock dividends paid to holders of record May 15, 1958, November 14, 1958 and May 15, 1959.

From the foregoing figures, it will be noted that over the one and one half year period January 1958 - June 1959 the stocks of TWA's main competitors advanced in greater amounts, percentagewise, than the Dow-Jones Industrials.

#### XXV. The TWA Stock Market Situation

##### 1958 and the First Half of 1959

The following tabulation shows a comparison of the market prices of TWA stock with the Standard & Poor's Index of Air Transport Stocks. It also shows the AIMV of TWA and the book value of TWA shares.

TWA Stock Market and Related Figures

		TWA - Historical				
		S. & P.'s	Market	No. of		Book
		Index	Price	Shares		Value
		of Air	per	Outstanding	AIMW	per share
		Transport	Share	End of Month	(Approx.)	End of
		Stocks		----	----	Month
				(000 omitted)		
January	1958	20.89	12-1/2	6,674	\$ 83,400	\$
June	1958	22.52	12-1/4	6,674	81,800	14.95
January	1959	31.35	18-1/8	6,674	121,000	16.49
February	1959	32.20	18-1/2	6,674	123,500	16.05
March	1959	33.82	18-7/8	6,674	126,000	15.91
April	1959	36.01	20-1/4	6,674	135,100	16.02
May	1959	34.98	21-3/4	6,674	145,200	16.36
June	1959	35.00	23-1/4	6,674	155,200	16.71
Percent Advance-						
Jan. 1958 - June 1959		67.5%	86.0%			
Jan. 1959 - June 1959		11.6%	28.3%			

Note: Figures for Standard & Poor's Index are monthly averages of weekly price indexes. (See Exhibit: General - 6.)  
TWA stock prices are month end closing prices. (See Exhibit: Trans World - 28.)

TWA, although operating at a loss in the first quarter of 1959, was sharply reducing its loss in that quarter as compared with the corresponding quarter of 1958. TWA stock advanced strongly in price during the first half of 1959, in fact, more than double that of the Standard & Poor's Index of Air Transport Stocks. And it was selling well over its book value.

The following tabulation shows the volume of trading in TWA stock on the NYSE during 1958 and the first half of 1959, expressed in terms of numbers of shares and in approximate dollar amounts.

	Volume of Trading - TWA Common Stock (*)					
	1958			1959		
	Volume of Trading Shares(*)	Approx. Price per sh. (**)	Approx. Dollar Volume	Volume of Trading Shares(*)	Approx. Price per sh. (**)	Approx. Dollar Volume
January	54,900	\$12	\$ 659,000	149,300	\$18	\$2,687,000
February	57,700	13	750,000	56,100	18	1,010,000
March	33,100	13	430,000	105,100	19	1,997,000
April	32,400	12	389,000	143,100	21	3,005,000
May	61,700	13	802,000	98,700	22	2,171,000
June	41,900	12	503,000	96,900	23	2,229,000
July	71,200	13	926,000			
August	78,100	14	1,093,000			
September	84,800	14	1,187,000			
October	146,900	15	2,204,000			
November	82,900	16	1,326,000			
December	74,200	16	1,187,000			

(\*) See Exhibit: Trans World - 29.

(\*\*) The figures for market prices are the mean of the high and low prices during each month, rounded to the nearest dollar.



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The following tabulation has been constructed to give a comparison of the market prices of TWA stock with its book values at year ends over the five-year period preceding 1959, and at the middle of 1959.

TWA - Relationship of Book Value to Market Price  
----- Historical -----

	Book Net Worth (000 omitted)	Number of Shares Outstanding (omitted)	Book Value per share	Market Price per share
December 31, 1954	\$ 67,207	3,337	\$20.14	29-3/4
December 31, 1955	72,621	3,337	21.76	25-1/4
December 31, 1956	70,299	3,337	21.07	19
December 31, 1957	111,930	6,674(*)	16.77	10-1/4
December 31, 1958	110,166	6,674	16.51	16-7/8
June 30, 1959	111,528	6,674	16.71	23-1/4

(\*) Including 3,337,036 shares issued and sold in 1957.

Note: Market prices are month end closing prices. (See Exhibit: Trans World - 9.)

We now turn to the relationship of market prices to earnings per share for TWA and its main competitors. For this purpose we use the "Investment Guide Cards" put out by Standard & Poor's Corporation in 1959. The figures reported on these cards, for the five years preceding 1959, are as shown on the following tabulation. The averages have been calculated by HRCO.

	<u>Earnings Per Share</u>			
	<u>TWA</u> <u>Historical</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL(**)</u>
1954 .....	\$ 3.10	\$ 1.71	\$ 1.51	\$ 3.62
1955 .....	1.62	1.66	2.32	3.36
1956 .....	(0.69)	2.31	2.40	4.55
1957 .....	(0.23)	1.35	1.31	2.28
1958 .....	(0.27)	0.82	1.97	3.88
Average - 5 years 1954-1958	\$ 0.71	\$ 1.57	\$ 1.90	\$ 3.52
Average - 3 years 1956-1958	(0.40)	1.49	1.89	3.57
Average Market Price - April, May, June 1959 (*)	\$21.85	\$30.77	\$30.08	\$38.23

( ) Denotes loss.

(\*) Figures are the average of the high and low prices taken from the Bank and Quotation Record.

(\*\*) Neither the earnings per share nor the market prices of UAL have been adjusted for the small stock dividends paid in 1957, 1958 and 1959.

Notes:

PAA - The 1955 annual report shows \$1.69 per share for 1954.  
AAL - Standard & Poor's states that the figure of \$1.51 per share for 1954 is before a "special credit" of \$0.46 per share. Including such "special credit", earnings per share for 1954 would be \$1.97; and the five-year average would be \$1.99.

TWA and UAL show no corresponding differences in figures.



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Translating the foregoing figures into price/earnings ratios (P/E), and using the Standard & Poor's figures of earnings per share, brings the following results:

	<u>Price/Earnings Ratios - Times</u>			
	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
Five-Year Average 1954-1958	30.8	19.6	15.8	10.9
Three-Year Average 1956-1958	-	20.7	15.9	10.7

Note: Prices taken at average market price - April, May, June 1959. Using the AAL figures including the "special credit" for 1954, the ratio for the five-year average 1954-1958 becomes 15.1 times (instead of 15.8 times).

It will be noted that TWA shows no figure for the P/E ratio for the three-year period 1956-1958, the reason being that TWA operated at a loss in each of the three years. Its three main competitors operated profitably in each of the five years 1954-1958. Nevertheless, as stated hereinbefore, TWA stock was strong in the market in early 1959, doubtless because of anticipated future operating profits.

We now turn to the "Recommendation" which is uniformly set forth at the top of each Investment Guide Card put out by Standard & Poor's, to see what investors were being advised by that service in the first half of 1959 in regard to the stocks of each of the four airlines.

#### TWA

The February 18, 1959 card says: "Fourth largest in the domestic field, this carrier is also a major international factor. While the route structure is favorable, operations are subjected to pronounced seasonable factors. Emphasis on Lockheed equipment in the past has placed the company at a competitive disadvantage domestically. While receipt of turbines on order would do much to remedy this situation, financing of this equipment still lies ahead. On the premise that a satisfactory solution to the jet financing problem will be found, speculative holdings may be retained."

The June 12, 1959 card says: "Fourth largest in the domestic field, this carrier is also a major international factor. While the route structure is favorable, operations are subjected to pronounced seasonal factors and the company has been at an equipment disadvantage in the past. Now, however, a fair number of jets should be in domestic service this summer and fall, suggesting that sharply improved results may lie ahead. Also, recent entry into the Florida market should eventually take up some of the seasonal slack. Thus, despite equipment financing problems and expected absence of cash dividends for some time, we would stay with speculative holdings."

#### PAA

The January 15, 1959 card says: "Pan American operates the largest air transportation system in the world, serving all continents and roughly 70 countries, and it operates a guided missile range for the Air Force at Cape Canaveral on a cost-plus-fixed-fee basis. Approximately 40 affiliated and associated enterprises are owned, including hotel chains, but earnings of these are not consolidated.

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As new jet planes will give the company a substantial equipment advantage over competition for nearly a year, sharply higher earnings are expected in 1959, and the speculative stock is well worth holding at this time."

The May 11, 1959 card says: "The largest international airline in the world, Pan American should enjoy a substantial competitive edge in 1959 and perhaps longer by virtue of its new jet equipment. The high load factors in prospect suggest that record earnings are possible in 1959. Elimination of losses on the important Latin American Division by putting the more efficient jets into service could mean another sizable profits gain in 1960. In view of the favorable earnings trend and the expectation of continued impressive growth over the long run, the shares are recommended for purchase by speculative accounts seeking capital gains."

#### A A L

The April 2 and April 13, 1959 cards say: "The largest domestic trunkline, this carrier has a well-balanced route structure and should enjoy a decided competitive equipment edge in 1959 and possibly longer by virtue of its early introduction of jets and turboprops. With costs on the new equipment expected to compare favorably with existing transports and margins likely to be lifted materially by the high load factors on these planes, sharply higher profits are possible in 1959. Both the Common and Convertible Preferred have above-average attraction for appreciation."

#### U A L

The January 28, 1959 card says: "With a major rival now providing jet service which United will offer initially this fall, the line will be at a temporary competitive disadvantage. Also, in the absence of a volume stimulant through strikes on other airlines and with costs trending higher, an earnings decline for 1959 seems unavoidable. However, in light of United's strong basic position and favorable longer-range prospects, holdings should be retained."

The June 5, 1959 card says: "In the months immediately ahead, United will be faced with intense competition from rival jets, and little or no growth in volume is possible. Profits could slip drastically. However, the carrier will get its own jets aloft this fall, restoring much of its competitive position. In view of the company's sound basic position and good long-range outlook, we would continue to hold the shares, notwithstanding the possibility of nearby price weakness."

Thus, Standard & Poor's was advising investors to hold TWA, buy PAA and AAL, and hold UAL.

We now turn to Moody's Stock Survey to see what that service was advising investors in the first half of 1959 in regard to airline stocks. The following is quoted from the only article which Moody's published on the subject at that time.

#### The Airline Stocks as Earnings Turn Upward

In its March 16, 1959 issue, Moody's Stock Survey says: "An above-average 15% gain in traffic is in prospect in 1959 for the eleven airlines we review here. Profit margins should improve, too, and our tentative estimate is that the group's earnings will be double what they were in 1958. \* \* \* \* \*

"The important earnings gains will be made by lines taking early delivery of jet or turboprop planes, or by those hurt by strikes in 1958. \* \* \* \* \*

"Most financing for original jet orders is completed, but only American is known to have wrapped up negotiations for its second-round purchases.\* American is one of the better financed airlines, and probably could handle its re-equipment program without an equity issue. As even American is known to be actively considering such financing, however, it seems apparent that no airline (except possibly Eastern, which recently negotiated a \$25 million convertible issue) can be considered free from further equity financing in the near future. But the current investment enthusiasm for convertible debentures makes it reasonably certain that few, if any, straight stock sales will be undertaken." (Nothing said pro or con regarding TWA.)

Thus, Moody's Stock Survey published a relatively bullish article on the subject of airline stocks in the spring of 1959. And it appeared to be noncommittal in regard to a choice as between the various companies. Both Moody's and Standard & Poor's were emphasizing the importance of the coming jet airplanes.

#### XVI. The TWA Reconstructed Situation

##### March 1959

The TWA reconstructed balance sheet as of March 31, 1959 (see Exhibit: Financials - 27) was as follows:

	<u>-Millions-</u>
Net Current Assets	\$ 10.3
Total Net Property and Equipment	275.1
Flight Equipment Fund	-
Other Funds Restricted for Flight Equipment Purchases	1.1
Investments and Long-Term Prepayments	<u>3.0</u>
Total Tangible Assets, Less Current Liabilities	<u>\$289.5</u>
Long-Term Debt	\$170.2
Other Non-Current Liabilities	1.2
Deferred Federal Income Taxes	11.4
Reserve for Overhaul of Jet Aircraft	<u>.1</u>
Total Non-Current Liabilities and Deferred Credits	<u>\$182.9</u>
Tangible Net Worth	\$106.6
Deferred Debits	<u>12.0</u>
Book Net Worth	<u>\$118.6</u>
Capital Stock	\$ 33.4
Capital Surplus	61.2
Retained Earnings	<u>24.0</u>
Total Stockholders' Equity	<u>\$118.6</u>
Funded Debt as % of Net Tangible Assets	59.1%

Thus, TWA reconstructed on March 31, 1959 had \$10.3 million of working capital and \$170.2 million of funded debt. The relationship of funded debt to net tangible assets was 59.1%. It had received, and paid for,

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5 out of the 33 Boeing jet transports which it had ordered.

TWA's capital expenditure program, as projected by PWCo. as of March 1959, is summarized in the following tabulation. (See Exhibit: Financials - 19.)

	<u>Property and Equipment</u>			<u>Training and Integration Costs and Other Deferred Debits</u>	<u>Total</u>
	<u>Jet Fleet</u>	<u>Piston Fleet</u>	<u>Ground and Nonoperating</u>		
1959 - Last 3 quarters	\$102.9	\$ 0.1	\$ 6.0	\$ 10.1	\$ 119.1
1960 - Year	144.3	-	8.0	15.0	167.3
1961 - Year	4.8	(1.2)	6.2	(0.3)	9.5
1962 - Year	4.3	(1.3)	4.7	(0.6)	7.1
1963 - Year	<u>(1.2)</u>	<u>0.7</u>	<u>5.8</u>	<u>0.1</u>	<u>5.4</u>
Total	<u>\$255.1</u>	<u>\$(1.7)</u>	<u>\$30.7</u>	<u>\$ 24.3</u>	<u>\$ 308.4</u>

( ) Denotes red figure.

With respect to the foregoing projection, it should be noted that:

(1) It includes provision for progress and final payments for 28 Boeing and 30 Convair jet transports for delivery prior to the end of 1960. (The figures under "Jet Fleet" for years subsequent to 1960 pertain principally to rotatable parts for these jet transports.) And -

(2) The figures are over and above the \$75.2 million advance payments for aircraft and engines which are incorporated as a part of the book value of Flight Equipment in the reconstructed balance sheet as of March 31, 1959.

Exhibit: Financials - 21 shows a five-year projection of TWA's money requirements as they would have appeared in March 1959. The following is a description of the basis on which the Exhibit has been prepared.

(1) Figures for net income, deferred taxes, and figures for depreciation and amortization, are taken from the C&C forecast of funds generated as of April 1959. (See Exhibit: Financials - 20.) This C&C forecast is based on timely acquisition (meaning prior to December 31, 1960) of the 33 Boeing and 30 Convair jet transports.

(2) It (the projection of money requirements) allows for cash flow from sales of piston aircraft during the years 1959-1962, inclusive. (See Exhibit: Financials - 20.)

(3) Like all projections of money requirements included in this report, it makes no allowance for the cost of required new capital such as interest, commitment fees, agency fees, etc., although it does allow for interest on the Series A Flight Equipment Notes.

(4) It provides for the capital expenditure program as projected by PWCo as of March 1959. And -

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(5) It starts with the amount of reconstructed TWA working capital as of March 31, 1959 and provides for a desirable working capital of \$10 million excluding Flight Equipment Expendable Parts.

The projection shows, on the foregoing basis, the amount of new money (meaning from outside sources) required quarter by quarter and cumulatively from March 31, 1959. The following tabulation sets forth the figures in summarized year-by-year form.

T W A <u>Projection of Money Requirements</u> <u>as of March 1959</u>		
	<u>By Period</u>	Cumulative from <u>March 31, 1959</u>
	-----	----- Millions -----
1959 - Second Quarter .....	\$ 21.4	\$ 21.4
1959 - Third Quarter .....	10.1	31.5
1959 - Fourth Quarter .....	37.3	68.8
<hr/>		
1960 - Third Quarter - The Peak Point.		160.7
<hr/>		
1960 - Year .....	82.3	151.1
1961 - Year .....	(92.1)	59.0
1962 - Year .....	(82.6)	(23.6)
1963 - Year .....	(76.3)	(99.9)

( ) Denotes red figure.

It will be noted that the March 1959 projections indicated a peak requirement, by the 1960 third quarter, of \$160.7 million.

The above projection is distorted in the years 1961 through 1963 because, under the basic assumptions upon which our report has been prepared, the projection does not allow for major capital expenditures by TWA beyond September 15, 1960, the date by which the report assumes that TWA would have received all of the flight equipment and substantially all of the ground equipment for which we have been asked to provide financing. On the basis of such assumptions, however, the March 1959 projection would have indicated that TWA could expect to have a substantial amount of liquid funds, beginning in 1962, with which to meet outlays for new equipment and facilities over and above that which our program has been designed to finance.

XXVII. The Recommended 1959 Financing

In estimating the appropriate "mix" between junior and senior financing to meet the peak need of \$160.7 million which was projected by the third



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quarter of 1960, the following points would have been particularly pertinent.

(1) As of March 31, 1959, reconstructed funded debt as a percent of net tangible assets was 59.1%.

(2) Thus, as of that date, assuming a total financing of, say, \$160 million, not more than \$100 million could have been raised via the issuance of additional equipment mortgage notes (or other senior securities) without TWA being in violation of the 60% voluntary action covenant of the Flight Equipment Mortgage.

(3) All of the new money, however, would not be required until the third quarter of 1960. And by that time TWA's net tangible asset position could be expected to show considerable improvement through retention of forecast earnings. The C&C April 1959 forecast (see Exhibit: Financials - 20) estimated that between March 31, 1959 and September 30, 1960 TWA would have net income of \$21.8 million (before allowance for cost of the required new money).

Under the above circumstances, we believe that we would have recommended junior financing in the amount of \$60 million. Subject to the sale of \$60 million of junior securities, we believe that TWA could have obtained commitments from institutional investors for the private purchase of Series B Flight Equipment Mortgage Notes to provide, over the next two years, a minimum of \$90 million and a maximum of \$110 million.

The following table (see Exhibit: Financials - 22 sets forth, as of March 31, 1959, a projection of TWA's funded debt to net tangible asset ratio, quarter by quarter, through December 31, 1963, assuming \$60 million of junior financing in May 1959 and sale of the maximum of \$110 million Series B Flight Equipment Mortgage Notes. For the purposes of the Exhibit, takedowns of the latter Notes are projected to be \$50 million on October 1, 1959 and \$60 million on April 1, 1960.

As of:		Projection of Funded Debt as % of <u>Net Tangible Assets</u>
June 30,	1959	48.6%
September 30,	1959	47.3,
December 31,	1959	54.6
March 31,	1960	57.1
June 30,	1960	61.7
September 30,	1960	59.4
December 31,	1960	59.7
March 31,	1961	61.7
June 30,	1961	59.4
September 30,	1961	56.0
December 31,	1961	55.9
March 31,	1962	57.6
June 30,	1962	55.0
September 30,	1962	53.1
December 31,	1962	52.9
March 31,	1963	53.8
June 30,	1963	52.5
September 30,	1963	50.8
December 31,	1963	50.6



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It will be noted that the table indicates that TWA could expect to go slightly over the 60% voluntary action ratio in the second quarter of 1960 and again in the first quarter of 1961. From that point on, however, the ratio was projected to show a steady decline, reaching the 50% level sometime in the second half of 1963. The table indicates that TWA would remain comfortably below the 65% default ratio throughout the period shown. We believe that, although the forecast indicated that temporarily TWA would go slightly above the voluntary limitation, it would have been able to obtain from institutional lenders the necessary commitments to purchase up to \$110 million of Series B Flight Equipment Mortgage Notes, assuming, of course, that the terms thereof were satisfactory to the lenders, and contingent upon the Company raising \$60 million of junior capital.

#### XXVIII. Recommended 1959 Junior Financing

In our opinion a convertible subordinated debenture issue would have been the logical vehicle for a \$60 million junior financing by TWA in 1959. To have sold \$60 million of TWA common stock, in view of the poor earnings record, would have been difficult. The use of preferred stock (either straight or convertible) would have been, comparatively speaking, too costly because of the non-deductibility of the dividends for corporate income tax purposes. Another, though lesser, factor influencing the decision to select convertible debentures would have been that airline convertible debenture offerings were very much "in vogue" at that time. Between October 1958 and July 1959 there were four such financings by airlines (AAL, PAA, Eastern and KLM Royal Dutch); UAL also issued convertible debentures in November 1960.

We would have recommended that the TWA convertible subordinated debenture issue be underwritten, and that it be offered directly to the public rather than preemptively to TWA stockholders. Timing of the offering would have been at the earliest date in 1959 (probably late May) by which audited 1958 financials would be available for inclusion in a public prospectus.

The Securities and Exchange Commission would not permit the presentation of forecasts or projections of revenues or earnings in a public prospectus. It would have been feasible, however, to make available the 1959 C&C forecast of funds generated (Exhibit: Financials - 20), on a confidential basis, to the members of the proposed underwriting group. We believe that

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the forecast would have satisfied the underwriters as to the basis soundness of the financing, particularly so in view of the assured delivery of the 63 jet transport fleet.

#### XXIX. Amendment of the Flight Equipment Mortgage

We have not in this report attempted to design, in detail, all of the provisions of the Flight Equipment Mortgage. We do not think, however, that the Mortgage as written in 1955 would, by its terms, have excluded subordinated debt from the definition of funded debt. Thus, we think that issuance of a TWA convertible subordinated debenture in 1959 would have required an amendment to the Mortgage.

In our opinion, TWA could have obtained, in early 1959, the required approval of the institutional holders of the Series A Notes to an amendment of the Flight Equipment Mortgage in such manner as to exclude Subordinated Debentures from the definition of Funded Indebtedness in an amount not exceeding \$60 million, provided:

(a) Subordination feature of the Debentures is in all respects satisfactory to the holders of the Series A Notes, including provision that -

- (i) Maturity of the Debentures is to be not sooner than July 1, 1984. (\*)
- (ii) Sinking Fund on the Debentures is not to start prior to July 1, 1969.
- (iii) Sinking Fund on the Debentures is not to exceed 6-2/3% of the issue per year.

(b) Purchases, redemptions or acquisitions of, or prepayments of principal on, the Debentures (other than payments made in accordance with mandatory sinking fund requirements) are to be included with cash dividends on, and redemptions of, stock for purposes of the covenant in the Mortgage which limits cash dividends and redemptions of stock.

#### XXX. Conversion Price and Interest Rate for TWA Convertible Subordinated Debenture Issue in May 1959

##### Conversion Price

Conversion price is the most important single factor in the pricing of a new issue of convertible debentures. Assuming that the interest yield thereon is reasonably in line with that obtainable from similar outstanding securities, it is the relationship between the conversion price and the then market price of the related common stock which determines the relative attractiveness of the offering to investors. Obviously, the closer the conversion price is set to the common market price the smaller the premium that

(\*) The maturity date of the Series B Flight Equipment Notes, the provisions of which are summarized later herein.

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the investor is paying for the underlying common shares and, therefore, the more attractive the offering becomes.

As managing underwriter of a TWA offering of convertible subordinated debentures in May 1959, it would have been our intent (and we would have so advised TWA) that the conversion price be set right on, or very close to, the then current market price of the TWA common stock. The historical market price of TWA's stock in mid-May 1959 was about \$21.75. It is appropriate that we compare "TWA historical" with "TWA reconstructed", from the investor's viewpoint, in order to determine whether or not, in our opinion, some adjustment should be made in the historical market price of the TWA common stock as of mid-May 1959 to allow for the effects of reconstruction. The following table sets forth data, pertinent to the TWA common stock, on both historical and reconstructed bases, as such data were or would have been available to investors in May 1959. (See Exhibits: Comparisons - 4 and Financials - 4, 5, 28 and 29.)

	<u>Historical</u>			<u>Reconstructed</u>		
	Net Income <u>standing</u> (millions) (000)	Shares Out- <u>standing</u> (000)	Net Income <u>per share</u>	Net Income <u>standing</u> (millions) (000)	Shares Out- <u>standing</u> (000)	Net Income <u>per share</u>
<u>Earnings</u>						
Net Income (Loss)						
1954	\$ 10.3	3,337	\$ 3.10	\$ 10.3	3,337	\$ 3.10
1955	5.4	3,337	1.62	4.8	6,673	0.72
1956	(2.3)	3,337	(0.69)	(2.7)	6,674	(0.40)
1957	(1.6)	6,674	(0.24)	(1.8)	6,674	(0.27)
1958	(1.8)	6,674	(0.27)	(1.7)	6,674	(0.25)
Total	<u>\$ 10.0</u>			<u>\$ 8.9</u>		
Average 1954-58	<u>\$ 2.0</u>		<u>\$ 0.70</u>	<u>\$ 1.8</u>		<u>\$ 0.58</u>
3 months ended-						
March 31, 1958	\$(11.1)	6,674	\$(1.66)	\$(11.2)	6,674	\$(1.67)
March 31, 1959	(3.8)	6,674	(0.57)	( 2.6)	6,674	(0.39)

As of March 31, 1959

Book Net Worth	\$ 106.2 million	\$ 118.6 million
Book Net Worth per share	\$15.91	\$17.77

It is fair to say that, on the whole, there is little difference between the historical and reconstructed data shown above. Reconstructed book value per share (\$17.77) is 12% higher than historical (\$15.91). In the first quarter of 1959, the reconstructed loss is about \$1.2 million less than the historical loss. On either basis, however, the improvement in the first

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quarter of 1959, over the first quarter of 1958, was substantial.

We think, therefore, that it is not appropriate to adjust the historical market price of the TWA common stock as of May 1959 by reason of the assumed reconstruction of then available earnings and book value data. There are, however, two other factors relating to market price of the TWA common stock to which we should give consideration.

The first of these two factors is the possible downward influence of the announcement of a proposed major offering of TWA convertible subordinated debentures. In many cases when an issuer publishes such an announcement it will be followed by a decline in the market price of that company's stock, the usually accepted reason being that the market is reflecting the potential dilution effect upon per share earnings. Exhibit: General - 15 presents pertinent data relating to price behavior of the common stocks of a number of representative companies following the public announcement of proposed convertible debenture financings. The list includes about an equal number of preemptive and nonpreemptive offerings. It also includes five offerings by airlines - a nonpreemptive issue by Continental Air Lines in June 1958; a nonpreemptive issue by KLM Royal Dutch Airlines in March 1959; a preemptive issue by PAA in July 1959; a nonpreemptive issue by UAL in November 1960; and a preemptive issue by National Air Lines in May 1961.

The exhibit indicates that in 11 out of the 20 offerings shown the price of the common stock was lower on the offering date than it was one month prior to the announcement of the financing. (The reason for selecting a date one month prior to the announcement date is to avoid, to the extent possible, price distortions caused by news leaks in advance of the official announcement.) The extent of the price decline ranged from 1.7% to 14.8%, with the median decline 9.3%. In the case of PAA the decline was 13.6%; in the case of KLM Royal Dutch the decline was 1.5%. In the other 9 offerings the price of the common was higher on the offering date than it was one month prior to the announcement date. The price increases ranged from 0.9% to 24%.

The second factor, which we believe would have influenced the TWA market price upward as compared to what it was historically, would have been the fact that in 1959 TWA would have been much better financed under the reconstructed program than it was historically. And thus investors would have

been able to see that TWA was really going to get its jets in 1959 and 1960, whereas such was not the case in the absence of a sound and adequate financing program. The 1959 quotations from Moody's and Standard & Poor's previously set forth herein clearly indicate that investors were quite sensitive to the value of the coming jets.

In our opinion there is no way to estimate accurately what, if any effect the announcement of a \$60 million convertible debenture offering would have had upon the price of the TWA stock in May 1959. Recognizing, however, that the potential dilution represented by an offering of that size was relatively large, we are going to assume a conversion price of \$18.50, which is 15% below the approximate \$21.75 price at which TWA's stock was selling in mid-May 1959. A conversion price of \$18.50 compares with a reconstructed book value per share of \$17.77 as of March 31, 1959.

#### Interest Rate

Assuming a conversion price set at or close to the then current market of the TWA stock, we believe that the recommended and doable interest rate on the TWA offering would have been 5%.

As a check on our pricing views, it is appropriate that we compare the TWA convertible subordinated debenture offering with similar issues put out by other airlines at dates within reasonable proximity to May 1959.

AAL sold such an issue in May 1959 via private placement. Eastern Airlines did likewise in October 1958. The KLM Royal Dutch issue was offered publicly in March 1959 and the PAA issue, in late July 1959.

Exhibit: Financials - 24 is a statistical comparison of a \$60 million 5% convertible subordinated debenture issue of TWA with these four other issues. The following tabulation summarizes the data set forth therein.

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	TWA Reconstructed	PAA	AAL	Eastern	KLM Royal Dutch
Coupon Rate .....	5%	4-7/8%	5%	5%	4-3/4%
Maturity Date .....	6/1/84	8/1/79	1/1/85	12/1/78	3/15/79
Amount Outstanding (\$000) .....	60,000	44,971	40,000	25,000	18,500
Offering Price .....	100%	100%	100%	100%	100%
<b>Total Pro Forma Capitalization (\$000) ..</b>	<b>441,400</b>	<b>334,334</b>	<b>370,143</b>	<b>222,281</b>	<b>141,543</b>
% Senior Debt .....	60.7	48.9	52.0	40.5	35.8
% this Issue and Pari Passu .....	<u>11.0</u>	<u>13.3</u>	<u>10.8</u>	<u>11.2</u>	<u>13.1</u>
% Total Long-Term Debt .....	73.7	62.2	62.8	51.7	48.9
% Capital Stock and Surplus .....	26.3	37.8	37.2	48.3	51.1
<b>Earnings(*) and Cash Flow(**) Coverage</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>	<b>Cash</b>
<b>of Total Pro Forma Fixed Charges</b>	<b>Ratio-Flow</b>	<b>Ratio-Flow</b>	<b>Ratio-Flow</b>	<b>Ratio-Flow</b>	<b>Ratio-Flow</b>
1954	1.4 2.1	1.9 1.2	2.5 3.3	4.2 4.9	2.1 2.4
1955	0.8 1.8	2.0 1.3	4.2 3.8	7.0 8.6	2.3 2.4
1956	(0.2) 1.6	3.0 1.3	4.1 3.9	6.6 8.4	2.3 2.7
1957	(0.1) 1.7	1.9 1.9	2.2 3.5	3.3 8.5	2.3 3.0
1958	<u>0.1 2.0</u>	<u>1.2 1.3</u>	<u>3.1 4.6</u>	<u>3.0 7.6</u>	<u>0.6 2.9</u>
Average - 5 years 1954-1958	0.4 1.8	2.0 1.4	3.2 3.8	4.8 8.0	1.9 2.7
12 months ended 3/31/59	0.6 2.6	1.4 1.3	2.6 4.6	3.1 8.4	0.4 2.8
% Conversion Price Over Market Price of Common at Time of Original Offering ....	(***)	7.6%	13.3%	11.1%	3.4%
<b>Market Price - Date .....</b>	<b>8/12/59</b>	<b>Placed</b>	<b>Placed</b>	<b>5/13/59</b>	
Price (%) .....	107-1/8	Privately	Privately	109-1/4	
Yield to Maturity (%) .....	4.32			4.07	

(\*) Before interest and income taxes  
(without allowance for earnings on  
new funds).

(\*\*) Before interest but after current  
income taxes (without allowance for  
earnings on new funds).

(\*\*\*) Assumed to be at or close to market  
price of common.

( ) Denotes loss.

Pertinent observations from the foregoing table are as follows:

(1) TWA's ratios of total funded debt and senior funded debt to total capitalization are the highest of the five airlines.

(2) TWA's earnings and cash flow coverage figures are the lowest of the five airlines, except that TWA's cash flow coverages are better than those of PAA.

(3) Interest rates for the four actual issues ranged from 4-3/4% to 5%.

(4) Spread between conversion price and market price at date of offering or private sale ranged between 3.4% and 13.3% for the four actual issues. In the case of TWA we have assumed a conversion price at or close to the market price of the common stock.

(5) Each of the publicly offered issues went to a substantial premium following the offering date. (Market price data are not available for the two privately placed issues.)

The PAA issue was rated Ba by Moody's and B1 by Standard & Poor's. The KLM Royal Dutch issue was rated B1 by Standard & Poor's. (Moody's does not rate issues by foreign corporations. Neither Moody's nor Standard & Poor's publishes ratings for private placements.) In view of the comparatively high debt ratio and low interest coverage figures, there is a



possibility that a TWA convertible subordinated debenture issue in May 1959 might have been rated no higher than B. On the other hand, the Moody's Ba category (B1 for Standard & Poor's) embraces a very broad spectrum of convertible subordinated issues differing substantially, one from another, in terms of investment quality. In arriving at a rating the services take into consideration a number of factors in addition to the purely statistical ones, including size of the issuer, position in the industry, future outlook, etc.

Generally speaking, however, rating is not nearly as important a factor in the pricing of a convertible debenture as it is in the pricing of a straight (non-convertible) debenture. In our opinion, regardless of whether it received a Ba or B rating, with an interest rate of 5% and a conversion price set at or very close to the market price of the common stock the TWA offering could have been successfully underwritten and marketed.

**XXXI. Recommended TWA Convertible Subordinated  
Debenture Financing**

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May 1959

In our opinion, we would have recommended an offering of TWA convertible subordinated debentures, in about the latter part of May 1959, on the following basis. And, as stated above, we believe that the issue on these terms could have been underwritten and successfully marketed.

<u>To be dated:</u>	June 1, 1959.
<u>Designation:</u>	Subordinated Debentures. (*)
<u>Amount:</u>	\$60 million.
<u>Procedure:</u>	Underwritten, nonpreemptive public offering.
<u>Trustee:</u>	The _____ Trust Company or Bank.
<u>Price:</u>	100%, flat.
<u>Interest Rate:</u>	5% per annum, payable semi-annually June 1 and December 1.
<u>Maturity:</u>	June 1, 1984.
<u>General Redemption:</u>	At any time on thirty days' notice at an initial price of 105% and on a decreasing scale through to one year prior to maturity.
<u>Redemption for the Sinking Fund:</u>	At any time on thirty days' notice, at 100% and interest.

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Sinking Fund: Annual amount of \$3,000,000 (5%) commencing June 1, 1970.

Subordination: In accordance with the definition of "Subordinated Debentures" set forth in the Flight Equipment Mortgage (as amended).

Conversion Privilege: At any time prior to June 1, 1969 (ten-year term) at the conversion price of \$18.50 per share. (\*\*) Conventional dilution adjustment clauses.

Limitations on Payment of Cash Dividends and Redemption of Stock: Earnings from December 31, 1958 onward plus a reasonable "cushion", plus net proceeds from sale of additional stock.

Application of Proceeds: General corporate purposes.

Modification of Indenture: The usual provisions based on 66-2/3% consent.

Underwriting Expenses: \$1,200,000 (2%).

Other Expenses of Issue: \$350,000.

Estimated Net Proceeds after underwriting and other expenses: \$58,450,000.

Closing Date: June 1, 1959.

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(\*) Note re:  
Name of Issue: The name of the issue would omit the word "Convertible" because, as indicated, the conversion privilege is to be limited to 10 years. (The word "Convertible" is sometimes included, when referring to the Debentures, for the purpose of convenience.)

(\*\*) Total amount of common stock issuable upon conversion of a \$60 million issue at the conversion price of \$18.50 amounts to 3,243,244 shares. On the reconstructed (as well as historical) basis TWA, at March 31, 1959, had 3,326,000 shares of authorized but unissued capital stock out of a total authorization of 10,000,000 shares. Thus, it had slightly more authorized shares available than it would have had to reserve for conversions. We think, however, that good corporate practice would have indicated an increase in the authorized shares, which would have required stockholder approval. We would have recommended that authorized shares be increased to 15,000,000.

XXXII. Recommended TWA 1959  
Flight Equipment Mortgage Loan

In our opinion TWA, in the second quarter of 1959, could and should have obtained commitments from institutional investors to purchase (subject to the prior sale of \$60 million convertible subordinated debentures) Series B Flight Equipment Mortgage Notes in the amount of \$90 million minimum to \$110 million maximum. Period of availability to run through December 31, 1960.

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### Interest Rate

We believe that institutional investors, in the second quarter of 1959, would have charged TWA an interest rate of 6% on the used portion of the Series B Flight Equipment Notes, and a commitment fee of 1/2% per annum on the unused portion.

Exhibit: Financials - 26 sets forth a comparison, as of May 1959, of \$110 million of 6% Series B Mortgage Notes of TWA with term debt securities of other airlines which were either then outstanding or arranged for at dates within reasonable proximity to May 1959. The following tabulation presents certain of the data appearing in the exhibit.

	TWA Reconstructed	PAA	AAL	DAL	Eastern	Delta	Northeast
Type of Issue .....	Mortgage Notes	Unsecured Notes	Unsecured Notes	Debentures	Unsecured Notes	Unsecured Notes	Unsecured Notes
Coupon Rate .....	6%	4-1/2%	5%	4%	3-3/4%-4.136%	6%	6%
Maturity Date .....	7/1/84	3/1/80	11/1/94	2/1/81	12/13/75	10/1/78	10/1/78
Amount (\$'000) .....	110,000	30,000	30,000	120,000	90,000	25,000	40,000
Total Pro Forma Capitalization (\$'000) .....	461,600	354,300	370,200	281,800	222,300	91,500	88,200
% this Issue, Pari Passu and Senior Debt .....	60.7	48.9	52.0	53.7	40.3	60.1	45.4
% Subordinated Debt .....	13.0	13.3	10.8	-	11.2	-	-
% Total Long-Term Debt ..	73.7	62.2	62.8	53.7	51.7	60.1	45.4
% Capital Stock and Surplus ..	26.3	37.8	37.2	46.3	48.3	39.9	54.6
Earnings(*) and Cash Flow(**) Coverage of Pro Forma Fixed Charges on this Issue, Pari Passu and Senior Debt							
	Cash Earn-Flow	Cash Earn-Flow	Cash Earn-Flow	Cash Earn-Flow	Cash Earn-Flow	Cash Earn-Flow	Cash Earn-Flow
1954	1.7 2.6	2.5 1.4	2.9 4.1	3.9 4.3	5.7 9.4	1.1 1.3	1.5 3.1
1955	0.9 2.2	2.6 1.3	5.2 4.6	4.3 4.3	9.4 11.6	2.0 1.8	1.9 4.0
1956	(0.2) 1.9	4.0 1.7	3.1 4.8	5.2 4.9	9.0 11.4	3.6 1.9	2.7 4.8
1957	(0.1) 2.1	2.5 2.2	2.7 4.2	2.8 4.8	4.5 11.5	2.2 1.8	3.5 5.5
1958	0.1 2.3	1.6 1.8	3.2 3.8	2.3 5.1	5.1 10.3	1.0 2.3	2.4 8.2
Average - 5 years 1954-1958	0.5 2.2	2.6 1.6	4.0 4.7	4.3 4.9	6.5 10.8	2.0 1.8	3.0 5.1
12 months ended 12/31/59	0.7 3.2	1.8 1.5	3.2 5.6	6.1 6.6	4.3 11.4	3.1 2.7	6.2 9.2

(\*) Before interest and income taxes (without allowance for earnings on new funds).

(\*\*) Before interest and after current income taxes (without allowance for earnings on new funds).

( ) Denotes loss.

It will be noted that the TWA debt ratio is higher, and its earnings and cash flow coverages are lower, than the comparable figures for each of the other airlines shown in the comparison, with the exception that TWA's cash flow coverage exceeds that of PAA and Delta. On the other hand, TWA would have been able to present the following favorable factors.

(1) A strong forecast of earning power arising from the assured ownership, by December 1960, of a jet fleet which (we venture to think) would have equaled or surpassed the fleets of each of its three main competitors as of that time.

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(2) A strong mortgage security, whereas the loans of each of the six other airlines used in the comparison were unsecured.

(3) A higher interest rate than that of any of the six other airlines except Delta and Northwest.

1959 Loan Agreement

We would have recommended that TWA negotiate and enter into a loan agreement in the second quarter of 1959 along the following general lines. And, in our opinion, such a loan agreement could have been obtained from institutional investors.

<u>Amount:</u>	Minimum \$90 million. Maximum \$110 million.
<u>Designation:</u>	Flight Equipment Mortgage Notes, Series B.
<u>To be dated:</u>	July 1, 1959.
<u>Procedure:</u>	Private placement loan commitment with institutional investors, subject to the sale of \$60 million principal amount of Convertible Subordinated Debentures.
<u>Price:</u>	Par plus accrued interest.
<u>Interest Rate:</u>	6% per annum, payable semi-annually July 1 and January 1.
<u>Commitment Fee:</u>	1/2% per annum on the unused portion, payable semi-annually July 1 and January 1.
<u>General Redemption Prices:</u>	106% and interest, sliding downward to 100% one year prior to maturity.
<u>Sinking Fund Redemption Price:</u>	100% and interest.
<u>Non-refundability Term:</u>	12 years.
<u>Availability:</u>	To and including December 31, 1960.
<u>Maturity:</u>	July 1, 1984.
<u>Sinking Fund:</u>	Commencing July 1, 1969; equal annual instalments to retire 100% by maturity. Doubling up permitted annually to cumulative maximum of three annual instalments.
<u>Security:</u>	The Flight Equipment Mortgage.
<u>Application of Proceeds:</u>	All into the Flight Equipment Fund with the Trustee under the Flight Equipment Mortgage.
<u>Trust Indenture Act of 1939:</u>	Upon request of any of the holders of the Notes, TWA will qualify the issue under the Trust Indenture Act of 1939.
<u>Agency Fee:</u>	0.15%.
<u>Estimated Other Expenses:</u>	0.033%.

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Limitation on  
Payment of Cash  
Dividends and  
Redemption  
of Stock:

Limited to consolidated net income earned from June 30, 1959 onward plus some reasonable "cushion", say \$5,000,000, plus net proceeds from sale of additional stock.

SEC

Registration:

On request of the holders of 66-2/3% of the Series B Notes.

Financial  
Reports:

Quarterly balance sheets and income accounts to be delivered to each holder of the Notes. Annual statements to be audited.

Closings:

Not more than three.

First Closing:

Assumed to be on October 1, 1959 in the amount of \$50,000,000.

XXXIII. The TWA Reconstructed Situation  
Post-1959 Financing through December 31, 1960

During the nine months ended December 31, 1959 reconstructed funds generated from internal sources turned out to be \$21.4 million higher than those forecast by C&C in April of that year. The improvement continued throughout all of 1960. As a result of the improved cash flow the reconstructed peak outside money need, which occurred in the third quarter of 1960, was \$33.7 million lower than had been indicated by the projection of money requirements prepared in early 1959. (See Exhibits: Financials - 20 and 30.) We have assumed a \$40.0 million takedown of Series B Flight Equipment Mortgage Notes as of April 1, 1960 (for a total of \$90.0 million taken down by that date) which would have been ample to meet the reduced peak outside money need.

As mentioned above, the improvement in reconstructed funds generated (vis-a-vis those forecast) continued in the fourth quarter of 1960. On a cumulative basis, total reconstructed generation of funds from internal sources during the period between March 31, 1959 and December 31, 1960 was \$46.3 million above the C&C forecast. Thus, we have assumed that TWA would not have taken down the remaining \$20.0 million of Series B Flight Equipment Mortgage Notes, the availability of which ran out on December 31, 1960.

TWA Ex. 5(a), page 73 of 75  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

**XXXIV. Comparative Financial Status  
of TWA and Its Competitors  
at the End of the 1955 - 1960 Period**

The following tabulation sets forth summarized balance sheets of TWA and its three main competitors as of December 31, 1960. TWA is shown on both historical and reconstructed bases. (See Exhibit: Comparisons - 4 and Exhibit: Financials - 4 and 27.)

Summarized Balance Sheets

December 31, 1960

	<u>TWA</u>		Increase			
			(Decreases)			
	Historical See Exh.: Financials - 4	Reconstructed and 27		PAA See Exhibit: Comparisons - 4	AAL	WAL
			Millions			
Net Current Assets .....	\$ 24.5	\$ 38.1	\$ 13.6	\$ 16.4	\$ 57.7	\$ 8.5
Total Net Property and Equipment(*)	327.1	446.3	119.2	407.2	347.8	404.8
Other Tangible Assets .....	2.6	2.6	-	32.1	3.1	3.0
Total Tangible Assets						
Less Current Liabilities .....	\$ 354.2	\$ 487.0	\$ 132.8	\$ 442.7	\$ 408.6	\$ 416.3
Long-Term Debt: Senior .....	\$ 123.2	\$ 260.2	\$ 137.0	\$ 270.3	\$ 188.8	\$ 217.0
Subordinated .....	100.0	60.0	(40.0)	47.0	40.0	23.0
Total .....	\$ 223.2	\$ 320.2	\$ 97.0	\$ 317.3	\$ 228.8	\$ 242.0
Deferred Credits .....	\$ 0.4	\$ -	\$ (0.4)	\$ 6.4	\$ -	\$ -
Deferred Federal Income Taxes .....	20.3	35.9	15.6	15.2	34.3	25.9
Miscellaneous Reserves .....	3.8	8.4	4.6	17.0	-	7.3
Total Non-Current Liabilities, Reserves, etc. ....	\$ 247.7	\$ 344.5	\$ 116.8	\$ 355.9	\$ 263.1	\$ 275.2
Tangible Net Worth .....	\$ 106.5	\$ 122.5	\$ 16.0	\$ 104.8	\$ 145.3	\$ 141.1
Deferred Debits and Intangibles ...	\$ 19.6	\$ 30.9	\$ 11.3	\$ 31.7	\$ 7.8	\$ 7.0
Book Net Worth .....	\$ 126.1	\$ 153.4	\$ 27.3	\$ 138.5	\$ 153.3	\$ 148.1
Preferred Stock .....	\$ -	\$ -	\$ -	\$ -	\$ 7.6	\$ -
Common Stock .....	33.4	33.4	-	6.4	8.2	42.2
Capital Surplus .....	48.9	61.2	12.3	71.2	39.3	54.1
Earned Surplus .....	43.8	58.8	15.0	60.7	98.2	51.8
Total Stockholders' Equity.	\$ 126.1	\$ 153.4	\$ 27.3	\$ 138.5	\$ 153.3	\$ 148.1
<b>Capital Structure - Percent</b>						
Long-Term Debt - Senior .....	35.3	54.9		39.3	49.4	35.4
- Subordinated .....	28.6	12.7		10.3	10.3	8.4
- Total .....	63.9	67.6		49.6	59.9	43.8
Stockholders' Equity .....	36.1	32.4		20.4	40.1	38.0
Total .....	100.0	100.0		100.0	100.0	100.0

(\*) Including expendable spare parts; advances for purchase of aircraft and engines; funds restricted for flight equipment purchases, etc.



TWA Ex. 5(a), page 74 of 75  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

XXXV. Comparison of the TWA Capital Structures -  
Historical and Reconstructed  
At the End of the 1955 - 1960 Period

<u>Historical</u>		<u>Reconstructed</u>	
		(000 omitted)	
<u>Senior Long-Term Debt</u>			
Equipment Mgtg.S.F. Notes, 6-1/2% due Dec. 1972	\$ 62,800	1955 Flight Equipment Mgtg. Notes, 4%, Series A, due Oct. 1, 1980	\$170,000
Equipment Mgtg. Serial Notes, 6%, due quarterly \$5,200 commencing Mar. 31, 1962	56,400	1959 Flight Equipment Mgtg. Notes, 6%, Series B, due July 1, 1984	90,000
Conditional Sales Contract, 3-1/2%, due quarterly through Jan. 1, 1963	1,919		
Conditional Sales Contract, 3-1/2%, due quarterly through May 15, 1963	1,943		
Instalment Contracts due 1969	<u>180</u>		<u>180</u>
Total	<u>\$123,242</u>	Total	<u>\$260,180</u>

Subordinated Long-Term Debt

6-1/2% Interim Subordinated Promissory Note to be re- placed by Subordinated Debentures due not earlier than June 1973 (*)	\$100,000	5% Subordinated Debentures due June 1984 (Convertible at \$18.50)	\$ 60,000
Total Funded Debt	<u>\$223,242</u>	Total Funded Debt	<u>\$320,180</u>

Capital Stock

6,674,000 shares repre- senting Stockholders' Equity of	<u>\$126,042</u>	6,674,000 shares repre- senting Stockholders' Equity of	<u>\$153,400</u>
Book Value per share	<u>\$18.90</u>	Book Value per share	<u>\$22.99</u>
Shares reserved for warrants	2,700(000).	Shares reserved for conversions	3,243(000)

Annual Interest Charges

<u>On Senior Long-Term Debt</u>			
Total	\$ 7,480	Total	\$ 12,200
<u>On Subordinated Long-Term Debt</u>			
Total	\$ 6,500	Total	\$ 3,000
<u>On Combined Long-Term Debt</u>			
Total	<u>\$ 13,980</u>	Total	<u>\$ 15,200</u>

(\*) Replaced in May 1961 by \$100,000,000  
6-1/2% Subordinated Income Debentures  
due 1978 (with Warrants to purchase  
2,700,000 common shares at \$20 per share  
to 6/1/65 and \$22 thereafter to 12/1/73).

TWA Ex. 5(a), page 75 of 75  
(Drexel Harriman Ripley, Inc. Report - Parts I & II)

XXXVI. Sources and Applications of Funds - Reconstructed

1956 - 1960

Figures for the reconstructed five-year money cycle (1956-1960) are set forth in Exhibit: Financials - 30. Working capital at each year end comes out as follows:

1956 .....	\$24.8 million
1957 .....	18.7 "
1958 .....	21.9 "
1959 .....	50.8 "
1960 .....	38.1 "

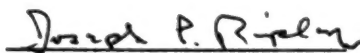
It will be noted that working capital comes out at figures which vary quite widely from year to year. The reason for the variations is that long-term financing operations cannot be arranged and carried out piecemeal in the precise amounts required from time to time by the money requirements program.


In actual practice, TWA would have had occasion to use bank credit to take care of the aforementioned variations and to provide for seasonal swings. We think that returns from excess working capital and idle money in the Flight Equipment Fund would counterbalance the cost of the bank credit.

XXXVII. Comment re: The Recommended Financing Program

We do not wish this report to be interpreted as meaning that we think the financing program recommended herein is the only program by which TWA might have been successfully financed to meet the Question Posed. There may well be other programs by which TWA might have been financed successfully in the period under review. As for the program which we have outlined, we believe that it is the one which, in our opinion, we would have recommended if we had been advising TWA in the years 1955-1960, and one which, if adopted, would have succeeded.

Drexel Harriman Ripley, Incorporated  
by

  
Joseph P. Ripley  
Honorary Chairman

  
Edward J. Morehouse  
Senior Vice President

TWA Ex. 5(b), Exhibit Trans World-2  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-  
Sheet 1 of 2

DIGEST  
of  
TWA PROSPECTUS  
Common Stock Offering

February 1952

Date: February 28, 1952

Amount: 242,987 shares @ \$21.25 per share. Gross proceeds: \$5,000,000 approx.

Type of Offering: Public; preemptive.

Underwriting: None.

Undertaking by Hughes Tool: Hughes Tool agreed to purchase such number of shares as would give TWA \$5,000,000 of proceeds net of expense.

Ratio of Offering: One share for each ten outstanding.

Purpose of Issue: General corporate purposes. TWA estimated that during 1952 it would make expenditures totaling approximately \$51,257,000 for aircraft, sinking fund, interest, etc.

Capital Structure:

	<u>Actual - February 2, 1952</u>	
	<u>Authorized</u>	<u>Outstanding</u>
3½% S.F. Debs. Ser. A, due June 1, 1956	\$24,437,000	\$24,437,000
3½% S.F. Debs. Ser. B, due Dec. 1, 1955	6,480,000	6,480,000
3% Notes (Secured), due monthly to May 1953	4,771,000	4,771,000
3% Notes (Secured), due monthly to Apr. 1955	9,371,000	9,371,000
3% Notes (Secured), due monthly to Apr. 1956	12,850,000	3,486,000
Notes (Secured) due monthly to July 1956	10,000,000	None
Common Stock, \$5 par	4,000,000 shs.	2,429,872 shs.

Relations with HTCO:

HTCO at the time of the offering owned 74% of the outstanding stock of TWA. The prospectus reported that the CAB had approved certain transactions between TWA and HTCO including the conversion of \$10,000,000 of TWA Subordinated Convertible 2-3/4% Notes held by HTCO into 1,034,423 shares of TWA Common Stock in August 1948. The CAB also approved the implementation of agreements dated April 5, 1950 and January 16, 1951 between HTCO, TWA and Equitable Life, by which TWA agreed to sell and HTCO agreed to purchase, if not otherwise sold, \$5,000,000 of Common Stock by March 31, 1952, and an additional \$5,000,000 by December 31, 1952.

The prospectus also refers to a Three-Party Agreement dated January 31, 1947 between HTCO, TWA and Equitable Life by which HTCO agreed to put its stock into a voting trust if TWA defaulted on its debentures all of which were held by Equitable Life. HTCO also gave Equitable Life its proxy to vote its holdings of TWA stock in case of a default of the debentures.

Conditional Sales Contracts:

The prospectus refers to conditional sales contracts with HTCO covering purchase of aircraft.

TWA Ex. 5(b), Exhibit Trans World-2  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-2  
Sheet 2 of 2

Price Range of  
Common Stock:

Price 19-3/4 at time of offering. (Range not given.)

Earnings

per share:

1946	\$ (9.11)
1957	(4.76)
1948	(2.57)
1949	1.53
1950	3.22
8 months 1951	2.08

Book Value

per share

August 31, 1951: \$12.60

Results of

the Offering:

HTCo took up its pro rata share (178,383 shares) of the offering and purchased an additional 25,727 shares, a total of 204,110 shares. Others subscribed for 36,664 shares, bringing the total to 240,774 shares sold. Gross proceeds: \$5,000,000 (approx.).

Note: This digest does not purpose to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.

TWA Ex. 5(b), Exhibit Trans World-3  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-3  
Sheet 1 of 2

DIGEST  
of  
TWA PROSPECTUS  
Common Stock Offering  
November 1952

Date: November 20, 1952.

Amount: 381,916 shares at \$16 per share. Aggregate offering: \$6,111,000 approx. 353,822 shares subscribed. Proceeds: \$5,700,000 approx.

Type of Offering: Public; preemptive.

Underwriting: None.

Undertaking by HTCo: HTCo agreed to purchase sufficient shares (to the extent sufficient shares were not otherwise sold) to provide TWA with net proceeds, after deducting expenses payable by TWA, of at least \$5,000,000.

Ratio of Offering: One share for each seven shares held.

Purpose of Issue: General corporate purposes.

Capital Structure - Actual November 5, 1952:

	<u>As of November 5, 1952</u>	
	<u>Authorized</u>	<u>Outstanding</u>
3-1/4% Sinking Fund Debentures (Series A) due June 1, 1956	\$22,437,000	\$22,437,000
3-1/4% Sinking Fund Debentures (Series B) due December 1, 1955	6,480,000	6,480,000
3% Notes (Secured) maturing in monthly instalments from November 30, 1952 to May 31, 1953 (1948 Notes)	2,087,202	2,087,202
3% Notes (Secured) maturing in monthly instalments from November 30, 1952 to April 30, 1955 (1950 Notes)	7,208,571	7,208,571
3% Notes (Secured) maturing in monthly instalments from November 30, 1952 to May 31, 1956 (Martin Notes)	11,571,200	11,571,200
3-3/4% Notes (Secured) maturing in monthly instalments from November 30, 1952 to May 31, 1956 (Martin Notes)	389,583	389,583
3-3/4% Notes (Secured) maturing in monthly instalments from November 30, 1952 to July 31, 1955 (Martin Notes)	2,805,000	2,805,000
3-3/4% Notes (Secured) maturing in monthly instalments from November 30, 1952 to July 31, 1956 (1049 Notes)	8,707,235	8,707,235
Common Stock, par value \$5 per share	4,000,000 shs.	2,673,418 shs.

If all Common Stock being registered is sold, 3,055,334 shares will be outstanding. At November 5, 1952, TWA had outstanding other long-term debt aggregating \$3,814,105, including \$3,747,636 under conditional sale contracts. The interest on the Series A and Series B Debentures was increased from 3% to 3-1/4% effective March 1, 1951.

TWA Ex. 5(b), Exhibit Trans World-3  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-3  
Sheet 2 of 2

Relations  
with HCo:

By a Three-Party Agreement, dated January 31, 1947, between HCo, TWA and Equitable Life, HCo agreed that if TWA should at any time be in default in paying principal or interest on its Debentures (all of which are owned by Equitable), HCo would, upon Equitable's request, subject to a Voting Trust Agreement, in a specified form, all shares of Common Stock of TWA (with certain exceptions) owned by HCo on January 31, 1947 or acquired by it thereafter. Equitable would be entitled to nominate two voting trustees and HCo (or, under certain conditions, the two voting trustees nominated by Equitable), the third. The voting trustees would be entitled to exercise all rights and powers with respect to all shares deposited under the Voting Trust Agreement, including the right to vote thereon or consent to any act of TWA. If made, the Voting Trust Agreement would terminate on (a) June 1, 1956, (b) the date of satisfaction of the Trust Indenture under which TWA's Debentures have been issued, or (c) the date on which Equitable terminates it, whichever is earlier.

By the Three-Party Agreement HCo also constituted Equitable its proxy, effective at any time TWA should be in default in payment of principal of or interest on any Debentures, to vote and act with respect to all shares of Common Stock of TWA with respect to which HCo would be entitled to vote and act, at any meeting of TWA stockholders. The proxy is to be valid until the Common Stock owned by HCo is subjected to the Voting Trust Agreement, or until none of the Debentures is outstanding, whichever is earlier, but in no event beyond June 1, 1956.

Conditional

Sales Contracts: TWA has entered into three conditional sales contracts with HCo relating to twelve Constellation aircraft. At November 5, 1952, \$252,000 principal remained to be paid under the first such contract, covering two Constellation 049 aircraft, in monthly instalments of \$18,000 each, with interest at the rate of 3% per annum; \$1,555,628.57 principal remained to be paid under the second such contract, covering six Constellation 049 aircraft, in monthly instalments of \$51,854.28 each, with interest at the rate of 2-1/2% per annum, and \$1,940,007.65 principal remained to be paid under the third such contract, covering four Constellation 749A aircraft, in monthly instalments of \$46,188.85 each, with interest at the rate of 3% per annum.

Price Range of  
Common Stock:

Price 18-1/4 at time of offering. Price range between October 1, 1952 through November 18, 1952, a high of 18-3/4 and a low of 16-3/8.

Earnings  
per share:

1946	\$ (9.11)
1947	(4.76)
1948	(2.57)
1949	1.54
1950	3.25
1951	3.36
7 months 1952	1.23

Book Value  
per share

July 31, 1952: \$15.80

Results of  
Offering:

353,822 shares subscribed. Gross proceeds: \$5,700,000 approx.

Note: This digest does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.



TWA Ex. 5(b), Exhibit Trans World-7  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-7  
Sheet 1 of 3

DIGEST  
of  
TWA PROSPECTUS

Common Stock Offering

1957

Date: June 17, 1957.

Amount: 3,337,036 shares of Common Stock.

Price: \$13 per share. Aggregate, \$43,381,000.

Type of Offering: Public; preemptive.

Underwriting: None.

Option to HTCo: To purchase all or any part of the unsubscribed shares with agreement on the part of HTCo to provide TWA with a minimum of \$34,000,000 of proceeds, which exceeded HTCo's pro rata portion by \$2,000,000 (approx.)

Ratio of Offering: Share for share.

Purpose of Issue, etc.: To pay or prepay amounts owed by TWA for purchase of 8 Lockheed Constellations and 25 Lockheed 1649As plus spare parts, etc. At May 1, 1957 \$38,000,000 was owed; with subsequent deliveries a total of \$51,000,000 additional will become owing; a total of \$89,000,000. After applying the \$34,000,000 of minimum stock proceeds, TWA will owe a balance of \$55,000,000 which will be financed by a \$25,000,000 bank loan payable in 36 equal monthly installments commencing January 1, 1958. An additional \$10,000,000 to be provided by a temporary bank loan payable December 1, 1957. Federal tax refund, \$9,000,000 approx. Discussions initiated for additional \$25,000,000 of institutional loans. HTCo agreed to extend a revolving credit to TWA in the amount of the difference between (a) the sum of the additional institutional loans plus the excess proceeds from the sale of the shares over \$34,000,000, and (b) \$15,000,000; such revolving credit to mature December 1, 1960.

Capital Structure  
- Pro Forma -  
Giving Effect to  
Financing:

3-3/4% Equipment Mortgage S. F. Bonds due December 1, 1969 .....	\$40,000,000	
3% Secured Notes due May 31 and June 30, 1957 .....	56,841	
4% Demand Notes .....	2,500,000	(1)
Common Stock .....	6,674,072 shs.	(2)

(1) Authorized \$10,000,000; credit extended by HTCo. Unsecured. Subordinated to the 3-3/4% Equipment Mortgage S.F. Bonds. Amount of the credit to be reduced to \$7,500,000 on August 1, 1957; to \$5,000,000 on November 1, 1957; and to \$2,500,000 on February 1, 1958. Credit to terminate April 30, 1958 "or at such earlier date as the Treasurer of HTCo deems necessary", etc. Interest at prime rate.

(2) Assuming sale of all shares offered.

TWA Ex. 5(b), Exhibit Trans World-7  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD- 7  
Sheet 2 of 3

Relations  
with HTCo:

Ownership: 75% of shares.  
Sale of Equipment: 8 Lockheed Constellations and 25 Lockheed 1649As at HTCo's cost plus interest pursuant to conditional sales contracts providing for payment to HTCo in monthly instalments over a period of five years.  
Amount: \$38,000,000.

Market Price  
of the Stock:

\$14 per share at the time of the offering. Trend since March 31, 1956 steadily downward.

Earnings per  
Share:

Calendar year 1952	\$2.30
1953	1.52
1954	3.10
1955	1.62
1956	(0.70)

The above earnings per share figures are based on the number of shares outstanding at the end of each year, adjusted retroactively for the 10% stock dividend declared in 1952.

The prospectus refers to a decision by the CAB to the effect that TWA had been overpaid by \$8,153,000 for the carriage of mail on its international route for the 1946-1953 period.

Results of  
Operations:

	<u>Operating Income (Loss)</u>		<u>Net Income (Loss)</u>	
	<u>1957</u>	<u>1956</u>	<u>1957</u>	<u>1956</u>
	(000 omitted)		(000 omitted)	
January	\$(2,583)	\$(1,182)	\$(1,452)	\$( 599)
February	(3,267)	(2,832)	(1,520)	(1,485)
March	(1,436)	(1,036)	( 258)	( 568)
April	( 783)	( 707)	39	( 253)
Total	<u>\$(8,069)</u>	<u>\$(5,757)</u>	<u>\$(3,191)</u>	<u>\$(2,905)</u>

Book Value of  
the Shares,  
December 31,  
1956:

\$21. (approx.)

Reference to  
Jet Aircraft:

The prospectus indicates that TWA's major U. S. airline competitors had announced that they had ordered jet aircraft for delivery beginning in 1958; that the cost of jet aircraft would greatly exceed that of the latest models of piston aircraft; and that their use would require substantial investments in ground equipment, etc.

The prospectus says that TWA had placed no orders for jet aircraft, but that it believed such aircraft would be necessary and that the cost thereof, including spare parts, etc., would exceed \$320 million.

The prospectus indicates that HTCo had placed orders, under contracts assignable to TWA, for 33 Boeing 707s and 30 Convair 880s, for delivery beginning in 1959; and that HTCo was not committed to sell any of such aircraft to TWA nor was the latter committed to buy any of them from HTCo.

TWA Ex. 5(b), Exhibit Trans World-7  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-7  
Sheet 3 of 3

Market Prices  
of the Rights:

<u>Date</u>	<u>High</u>	<u>Low</u>
6/18/1957	1/2	3/8
6/19	1/2	3/8
6/20	1/2	3/8
6/21	1/2	3/8
6/24	1/2	3/8
6/25	1/2	3/8
6/26	1/2	3/8
6/27	5/8	3/8
6/28	3/4	1/2
7/1	7/8	5/8
7/2	3/4	1/2
7/3	5/8	1/2
7/5	3/4	1/2
7/8/1957	3/4	5/8

Results of  
the Offering:

Total Shares Sold	3,337,036
Shares Purchased by HRCO	2,692,959
Shares Purchased by Stockholders other than HRCO	644,077

Note:

This digest does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source:

Prepared by HRCO.

TWA Ex. 5(b), Exhibit Trans World-8  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: TRANS WORLD-8

TWA

DATA ON COMMON STOCK ISSUES  
EXCEPT ISSUES LIMITED TO EMPLOYEES  
JANUARY 1, 1946 TO FEBRUARY 28, 1963 (1)

Offerings to Stockholders

Offering Date	Shares Issued	Par Value	Offering Price	Gross Proceeds	Costs of Flotation		
					Under- writers' Fees	Other Expenses	Net Proceeds
2/16/49	404,112	\$5.00	\$10.00	\$ 4,041,120	\$85,921	\$116,443	\$ 3,838,756
2/27/52	240,774	5.00	21.25	5,116,448	-	116,429	5,000,019
11/19/52	353,822	5.00	16.00	5,661,152	-	79,102	5,582,050 (2)
6/17/57	3,337,036	5.00	13.00	43,381,468	-	192,490	43,188,978

Notes: (1) In addition to the offerings to stockholders listed herein (a) 1,034,423 shares of common stock were issued on August 24, 1948 in exchange for the surrender and retirement of Subordinated Convertible 2-3/4% Notes, owned by Hughes Tool Company, in the principal amount of \$10,000,000 plus accrued interest; (b) a stock dividend of 302,724 shares of common stock was issued to stockholders of record December 15, 1952.

(2) Hughes Tool Company had agreed to purchase, if other purchasers were not available, sufficient shares to provide TWA with net proceeds of at least \$5,000,000. It was not necessary for Hughes Tool Company to purchase more than 263,100 shares represented by its subscription rights.

Source: Prepared by ERCo. from prospectuses and annual reports.

TWA Ex. 5(b), Exhibit Comparisons-10  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: COMPARISONS-10  
Sheet 1 of 2

COMPARATIVE RESULTS OF OPERATIONS

TWA - PAA - AAL - UAL

1955 - 1960

Historical

The following tabulation shows aggregate summarized operating figures for each of the four airlines for the 1955-1960 period. (See Exhibit: Comparisons - 4.)

	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
	<u>000,000</u>			
Total Operating Revenues	\$1,733.1	\$1,922.3	\$1,981.9	\$1,805.5
Net Operating Income	35.8	100.1	169.1	128.2
Net Income, including Capital Gains	15.6	53.4	97.9	73.1
Cash Dividends Declared:				
Preferred	None	None	3.3	0.5
Common	None	30.2	45.9	16.5
Total	None	\$ 30.2	\$ 49.2	\$ 17.0
Revenue Airplane Miles Flown	670.9	574.3	794.8	746.1
Available Seat Miles	42,846.1	35,587.2	47,055.2	44,855.2
Net Operating Income:				
Per Revenue Airplane Mile	¢ 5.33	17.42	21.27	17.18
Per Million Seat Miles	\$ 835.	2,812.	3,593.	2,857.

In the 1955-1960 period TWA earned only \$15.6 million as compared with \$53.4 million for PAA, \$97.9 million for AAL, and \$73.1 million for UAL. TWA paid no dividends. PAA paid \$30.2 million in dividends and kept \$23.2 million; AAL paid \$49.2 million in dividends and kept \$48.7 million; and UAL paid \$17.0 million in dividends and kept \$56.1 million.

The tabulation on the following page shows corresponding figures year by year.

TWA Ex. 5(b), Exhibit Comparisons-10  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: COMPARISONS - 10  
Sheet 2 of 2

	<u>TWA</u>	<u>PAA</u>	<u>AAL</u>	<u>UAL</u>
	<u>(000 omitted)</u>			
<u>Total Operating Revenue:</u>				
1955	\$217,431	\$238,059	\$260,757	\$235,578
1956	240,394	288,541	291,772	262,791
1957	263,664	312,678	305,956	281,947
1958	284,841	313,176	317,240	316,816
1959	348,458	356,810	377,702	329,225
1960	<u>378,350</u>	<u>413,071</u>	<u>428,482</u>	<u>379,147</u>

Net Operating Income (Loss):

1955	\$ 11,575	\$ 13,024	\$ 39,280	\$ 24,734
1956	(4,131)	23,166	36,997	24,207
1957	(4,539)	14,329	18,037	12,312
1958	(375)	7,235	26,343	30,553
1959	17,263	16,958	24,409	20,898
1960	<u>16,046</u>	<u>25,387</u>	<u>24,071</u>	<u>15,493</u>

Net Income (Loss) Including Capital Gains:

1955	\$ 5,407	\$ 10,669	\$ 18,609	\$ 11,245
1956	(2,327)	14,760	19,573	14,681
1957	(1,558)	8,089	10,886	7,888
1958	(1,764)	5,090	16,080	14,300
1959	9,568	7,724	21,013	13,799
1960	<u>6,307</u>	<u>7,089</u>	<u>11,783</u>	<u>11,171</u>

Revenue Airplane Miles Flown:

1955	97,249	80,068	121,686	110,031
1956	107,480	94,827	133,368	121,692
1957	118,633	102,235	143,089	130,370
1958	117,752	103,867	134,410	135,514
1959	119,587	101,317	128,408	127,476
1960	<u>110,213</u>	<u>91,996</u>	<u>133,872</u>	<u>120,969</u>

Available Seat Miles: (\*)

1955	5,405	4,327	6,409	5,892
1956	6,202	5,128	7,161	6,734
1957	6,985	5,784	7,926	7,537
1958	7,256	6,033	7,645	8,090
1959	8,071	6,452	8,173	7,722
1960	<u>8,926</u>	<u>7,864</u>	<u>9,823</u>	<u>8,881</u>

Net Operating Income (Loss):

Per Revenue Airplane Mile - ¢

1955	11.90	16.27	32.28	22.48
1956	(3.84)	24.43	27.74	19.89
1957	(3.83)	14.02	12.61	9.44
1958	(0.32)	6.97	19.60	22.55
1959	14.44	16.74	19.01	16.39
1960	<u>14.56</u>	<u>27.60</u>	<u>17.98</u>	<u>12.81</u>

Per Million Available Seat Miles - \$

1955	2142.	3010.	6129.	4198.
1956	(666.)	4518.	5166.	3595.
1957	(650.)	2477.	2276.	1634.
1958	(52.)	1199.	3446.	3777.
1959	2139.	2628.	2987.	2706.
1960	<u>1798.</u>	<u>3228.</u>	<u>2450.</u>	<u>1745.</u>

(\*) Millions

Source: Prepared by HRCO from Prospectuses, Annual Reports and Monthly Manuals.



TWA Ex. 5(b), Exhibit Pan American-1  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: PAN AMERICAN-1

**DIGEST  
of  
PAA PROSPECTUS**

**Offering of Capital Stock  
and Stock Purchase Warrants**

1945

**Date:** July 3, 1945

**Amount:** 2,043,261 units, each consisting of 1 share of Capital Stock and a Stock Purchase Warrant giving the right to purchase one additional share of Capital Stock.

**Price:** \$21.50 per unit. The Stock Purchase Warrant was exercisable at \$16 per share. Warrants expired 2 1/2 years after the offering. Amount of offering, \$42,398,000 not including possible exercise of the Stock Purchase Warrants which, if completely exercised, would yield an additional \$36,800,000. (See Exhibit PAA-2)

**Type of Offering:** Public; preemptive.

**Underwriting:** By a group of about 65 investment houses headed by Kuhn Loeb, Blyth, Lazard and Ladenburg, Thalmann.

**Ratio of Offering:** 1 unit for each 2 shares of capital stock.

**Purpose of Issue:** General corporate purposes. Prospectus said that the company had \$37 million of outstanding demand bank loans, which had been made in anticipation of the proceeds from the sale of securities offered by the prospectus. Also "a substantial number of additional aircraft" was about to be acquired.

**Capital Structure:** Authorized capital stock: 3,000,000 shares, of which 1,993,261 were outstanding as of December 31, 1944. In February 1945 shares were split 2 for 1 and authorized capital stock was increased to 10,000,000 shares, whereupon 3,986,522 shares were outstanding. In June 1945, Atlas Corporation purchased 100,000 shares at \$16 per share, realizing proceeds of \$1,600,000.

**Earnings:** Company showed a profit on the net income line in each year of the previous 10 years, in varying amounts from a low of \$47,000 in 1938 to a high of \$3,780,000 in 1942. Net income for 1944 was \$1,619,000.

**Results of Offering:** 1,932,619 units were subscribed by the stockholders. The balance of 110,642 units was taken up by the underwriters.

**Note:** This digest does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by DRCA.

DIGEST  
of  
PAA INSURANCE LOAN AGREEMENT  
1955

**Dated:** May 10, 1955

**Parties:** PAA and eighteen insurance companies

**Amount:** \$60,000,000

**Availability:** Until July 1, 1956

**Borrowings:** \$25,200,000 advanced May 10, 1955.  
Remainder in one or two instalments on or prior to July 1, 1956. If in two instalments, the first instalment shall be for not less than \$10,000,000.

**Rate:** 3 3/4% per annum, payable semi-annually.

**Maturity:** March 1, 1995.

**Sinking Fund:** Fixed sinking fund payments of \$3,900,000 on March 1, of each year from 1966 to 1979 and a payment of \$5,400,000 on March 1, 1980. Such March, 1980, payment will be the final payment unless all or some of the 3 3/4% Promissory Notes are deferred (to a date not later than March 1, 1995), at the request of the Company and with the acceptance of the noteholders. No premium required for sinking fund payments.

**Commitment Fee:** 1/2 of 1% per annum (a) on amount(s) taken down (subsequent to initial \$25,200,000 take down) computed from May 1, 1955, to date of closing(s); and (b) on balance not taken down as of July 1, 1956, computed from May 1, 1955.

**Prepayments:** Permitted at any time at option of Company subject to a premium of 3 3/4 points if prepaid on or before March 1, 1956, the premium decreasing by 1/8 point for each succeeding 12-month period through the period beginning March 1, 1973; decreasing by 1/4 point for each 12-month period thereafter until par is reached with the 12-month period beginning March 1, 1979.

However, prior to September 1, 1967, such prepayments may not be made with funds obtained through borrowings or the sale of non-convertible preferred stock having an interest or dividend rate of less than 3 3/4%.

**Modification:** Holders of 66 2/3% of notes may waive covenants.

**Negative Covenants:** No mortgages allowed besides (i) usual exceptions; and (ii) purchase money mortgages not exceeding \$7,500,000 in the aggregate at any one time providing further that Asset Ratio is at least 100%.

No additional debt (except subsequent amounts under this Agreement) unless thereafter pro forma Asset Ratio would be at least 100%. Asset Ratio must not be less than 100% at any time on or after July 1, 1957.

Negative  
Covenants,  
Continued:

No stock payments permitted if aggregate thereof subsequent to Dec. 31, 1954 would exceed aggregate of (i) \$10,000,000 plus or minus (ii) net income or deficit after Jan. 1, 1955 plus (iii) the net proceeds from any class of stock after Dec. 31, 1954 up to but not in excess of expenditures after Dec. 31, 1954 for redemption, retirement, purchase or other acquisition of any shares of any class of stock of Company.

Company will not permit 25% of unpaid Rentals (commuted to present value on basis 3 3/4% per annum) for maximum period for which lessee may be obligated to aggregate more than 10% of the sum of Adjusted Fundable Assets.

No sale or merger, unless new company assumes all obligations of this Agreement. Should such happen and lien is involved, PAA will secure notes by prior lien.

Neither Company nor any Subsidiary will sell, lease, transfer or otherwise dispose of any substantial part of its assets if in the opinion of the Company, such transaction would adversely affect in a material degree the interests of the note-holders on the ability of the Company to meet all its obligations when they become due.

DefinitionsFundable Assets = sum of:

- (i) Excess Current Assets (i.e., amount of current assets in excess of 180% of Adjusted Current Liabilities) plus
- (ii) 75% of amount of Flight Equipment, Net of Depreciation plus
- (iii) 25% of amount of Ground Equipment, Net of Depreciation minus
- (iv) amount of reserves existing in connection self insurance.

If current assets are less than 180% of Adjusted Current Liabilities (i.e., current liabilities less amounts which would be included in Restricted Indebtedness) there shall be deducted from (ii) and (iii) the difference between 180% of Adjusted Current Liabilities and current assets.

Restricted Indebtedness shall mean

- (i) Funded Debt
- (ii) Current Debt
- (iii) Unearned transportation revenue
- (iv) 25% of amounts due within 6 months under Contractual Obligations
- (v) 25% of aggregate unpaid Rentals for maximum period for which lessee is obligated

provided Restricted Indebtedness shall not include any Convertible Subordinate Debt.

TWA Ex. 5(b), Exhibit Pan American-3  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: PAN AMERICAN-3  
Sheet 3 of 3

Asset Ratio = Adjusted Fundable Assets  
Adjusted Restricted Indebtedness

Adjusted Fundable Assets are Fundable Assets of the Company and of Subsidiaries adjusted to eliminate intercompany items such as would be eliminated in a consolidated balance sheet and taking into account as to each other item the percentage of ownership of such subsidiary held by the Company directly or indirectly through one or more subsidiaries.

Adjusted Restricted Indebtedness follows the same pattern as above in relation to Restricted Indebtedness.

Note:

This digest does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.

DIGEST  
of  
AAL PROSPECTUSOffering of Debentures and Convertible Preferred Stock1946

Date: June 11, 1946.

Amount: \$40,000,000 of 3% Debentures and 400,000 shares of 3-1/2% Convertible Preferred Stock.

Price: 100% for the Debentures and \$102 per share for the Preferred Stock. Aggregate offering price, \$40,000,000 for the Debentures and \$40,800,000 for the Preferred Stock, a total of \$80,800,000.

Type of Offering: Public; not preemptive.

Underwriting: By about 180 underwriters headed by Kidder Peabody, Lehman Brothers and Glorie Forgan.

Description of the Debentures: Interest rate 3%. Term 20 years. Closed issue. Redeemable on a sliding scale of prices starting at 102½. Redeemable for sinking fund at 100%. Debentures not secured by lien but protected by a negative pledge clause. Limitation of creation of additional funded debt on the basis of ratio of net current fixed assets to be 175% of all funded debt. Limitation on payment of dividends.

Preferred Stock: Authorized issue 600,000 shares. Issuable in series. Initial series to bear 3½% dividend; redeemable on a sliding scale commencing at \$104 per share; initial series convertible at any time at \$21 per share of common stock; subject to adjustment.

Purpose of Issue: General corporate purposes including payment of \$25,000,000 of short-term bank loans. Estimated commitments to purchase flight equipment, etc., aggregated approximately \$96,000,000, of which \$19,000,000 had been paid prior to the date of the prospectus. Additional moneys were also required for capital expenditures, other than for flight equipment, amounting to an aggregate of \$44,000,000 over the (then) next two years. Total capital improvement program indicated as amounting to about \$106,000,000, toward which the proceeds of the financing would be applied. Balance of about \$20,000,000 to be obtained from undistributed earnings or possible future financing.

TWA Ex. 5(b), Exhibit American-1  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: AMERICAN-1  
Sheet 2 of 2

Capital

Structure:

Pro forma, giving effect to financing - except employees stock -

<u>Title of Issue</u>	<u>Amount authorized</u>	<u>Amount outstanding as of March 31, 1946</u>	<u>Amount presently to be outstanding</u>
Funded Debt: *			
3% Sinking Fund Debentures, due June 1, 1966	\$40,000,000	None	\$40,000,000
Capital Stock:			
Preferred Stock, cumulative, issu- able in series, \$100 par value	600,000 shs.		
3½% Cumulative Convertible Preferred Stock		None	400,000 shs.
Common Stock - \$1 par value	12,000,000 shs.**	6,452,836 shs.**†	6,452,836 shs.**†

\* On March 31, 1946 there was outstanding \$25,000,000 principal amount of short-term notes, issued February 28, 1946 to fifty-four commercial banks, bearing interest at the rate of 1½% per annum and payable 180 days from issue, which will be paid in connection with this financing. There were also outstanding on such date guarantees of certain similar short-term bank loans in the amount of \$10,000,000 made by American Overseas Airlines, Inc.

\*\* Giving effect, as of March 31, 1946, to the five-for-one split-up of Common and Employees Stock that became effective on April 22, 1946.

† Without reflecting additional shares that may be hereafter issued as described under "Proposed Acquisition of Control of Mid-Continent Airlines, Inc." and under "Stock Options", or upon conversion of shares of the Preferred Stock being offered hereby.

Earnings.

The record of earnings for the previous ten years, i.e., 1936-45, showed that AAL operated profitably in every year except 1937 when it showed a loss of \$199,000. Net income in each of the three calendar years immediately prior to the offering was as follows:

1943	\$3,193,000
1944	4,396,000
1945	4,339,000

For the three months ended March 1946, the company showed a loss of \$448,000; this was probably due to seasonal reasons.

Results of

the Offering:

The Debenture offering was somewhat of a failure. As of June 21, 1946 approximately \$23,300,000 of the Debentures remained unsold; and as of June 24, 1946 the offering price was reduced from 100% to 96.35%.

The result of the Preferred Stock offering is not readily available.

With the entire issue underwritten the Company realized the entire \$80,800,000 (approx.) less expenses.

Note:

This digest does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.



TWA Ex. 5(b), Exhibit United-3  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: UNITED-3

BRIEF SUMMARY

of

UAL 1947 FINANCINGPrincipal Aspects:

(A) Term Bank Loan	\$28,000,000
(B) Twenty-Year 3-1/2% Debentures, Series A	\$12,000,000
(C) 4-1/2% Cumulative Convertible Preferred Stock (\$100 par value)	94,773 shares

- (A) By the terms of a Credit Agreement entered into with certain banks on February 6, 1947 the Corporation could borrow (subject to certain asset tests being met), on a revolving basis on or before July 1, 1948, up to an aggregate of \$28,000,000 at any one time outstanding. Each such borrowing was to be evidenced by 1-1/2% notes, dated the day of the borrowing, and payable July 1, 1948. There was a commitment fee of 1/4 of 1% per annum on the average daily amount of the commitment unused prior to July 1, 1948.

The Agreement provided that, on July 1, 1948, the various banks would make term loans to the Corporation in the amount of the balance then remaining unpaid on borrowings under the revolving credit. Term loans so made would mature in 20 equal consecutive quarterly instalments, and would bear interest of 2%.

As a condition to the first borrowing under the Credit Agreement the Corporation was required to raise not less than \$20,750,000 through the sale of debentures and preferred stock.

- (B) On February 11, 1947 the Corporation entered into agreements with Metropolitan Life and Mutual Life under the provisions of which the insurance companies agreed to purchase, at 100%, an aggregate of \$12,000,000 Twenty-Year 3-1/2% Debentures, Series A. Such purchase was subject (a) to the sale by the Corporation, on or before March 12, 1947, of 94,773 shares of 4-1/2% Cumulative Preferred Stock at a price to produce minimum net cash proceeds of \$8,900,000, and (b) to the execution, on or before March 12, 1947, of the Credit Agreement described above.
- (C) On February 11, 1947, 94,773 shares of 4-1/2% Cumulative Preferred Stock, \$100 par value (convertible prior to 1957) were offered to stockholders, at \$100 per share, in the ratio of one share of Preferred for each 19-1/2 shares of Common. Stockholders subscribed for 76,854 shares (81%). Underwriters took up the balance. Proceeds to the Corporation, after expenses and underwriting commissions, aggregated about \$9,160,000.

Note: This summary does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO from the relevant papers.

TWA Ex. 5(b), Exhibit United-4  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: UNITED - 4

BRIEF SUMMARY

of

UAL 1952 AND 1954 FINANCINGS

Principal Aspects:

(A) Fifteen-Year 3-1/2% Debentures, Series B	\$10,000,000
(B) Call of outstanding shares of Preferred Stock (1947 Series) and issuance of Cumulative Preferred Stock, 4-1/2% Series of 1952	\$22,386,500
(C) Term Bank Loan	\$45,000,000
(D) Twenty-Year 3-3/4% Debentures, Series C	\$20,000,000

- (A) On February 1, 1952 the Corporation sold, at par, \$10,000,000 of Fifteen-Year 3-1/2% Series B Debentures to the Metropolitan Life and the Mutual Life, pursuant to an agreement covering such sale which had been entered into in April 1951.
- (B) On March 18, 1952 the Corporation called all of the then outstanding shares of its Preferred Stock (1947 Series). Of these, 445 shares were redeemed, at the call price of \$102.50, and 36,073 shares were converted into 152,206 shares of Common Stock. On March 19, 1952, 223,865 shares of Cumulative Preferred Stock, 4-1/2% Series of 1952, \$100 par value (convertible prior to 1962) were offered to stockholders, at \$100 per share, in the ratio of one share of Preferred for each eleven shares of Common. Stockholders subscribed for 81,510 shares (36%). Underwriters took up the balance. Proceeds to the Corporation, after expenses and underwriting commissions, aggregated about \$21,650,000.
- (C) On July 1, 1952 the Corporation entered into an agreement with certain banks under which the banks agreed to lend up to \$45,000,000 to the Corporation (subject to certain asset tests being met) at any time to and including December 31, 1954. Each borrowing thereunder was to be evidenced by a note dated as of the borrowing date, bearing interest at 3-1/4%, and payable in 18 equal quarter-annual instalments, the first of which would mature on April 1, 1955. There was a commitment fee of 1/2 of 1% per annum on the average daily amount of the commitment unused to and including December 31, 1954.
- Upon completion of such standby credit agreement, the \$7,000,000 balance of the 1947 term bank loan was paid off and the previous outstanding bank credit agreement of \$16,000,000, entered into early in 1951, was cancelled.
- (D) On July 20, 1954, the Corporation sold, at par, \$20,000,000 of Twenty-Year 3-3/4% Series C Debentures to the Metropolitan Life and the Mutual Life.
- On July 1, 1954, the 1952 standby credit agreement with the banks was amended so as, among other things, to reduce the aggregate amount of the available credit from \$45,000,000 to \$30,000,000 and to extend the availability date from December 31, 1954 to December 31, 1955.

Note: This brief summary does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO from the relevant papers.

DIGEST

of

HAL BANK CREDIT AGREEMENTDated March 1, 1955

**Amount:** \$30,000,000

**Availability:** Until December 31, 1957

**Rate:** 3% per annum on Short Term Notes.  
Payable quarterly.

3 1/4% on Long Term Notes.  
Payable quarterly.

**Maturities:** Short Term Notes mature January 1 of year following date loan is made or are convertible into Long Term Notes at such date. Long Term Notes payable in 20 equal consecutive quarterly instalments beginning April 1 following the date of Long Term loan. The last possible quarterly maturity April 1, 1963.

**Prepayment:** Permitted without penalty on 3 days' notice unless prepayment is from proceeds of loans from other banks, in which case 1/2 of 1% premium to maturity is to be paid. Until December 31, 1957 re-borrowing permitted to the extent Short or Long Term Notes shall be prepaid.

**Commitment Fee:** 1/4 of 1% per annum on unused portion of credit, payable quarterly.

**Termination or Reduction of Commitment:** Termination or reduction in multiples of \$1,000,000 permitted on 5 days' notice.

**Working Capital:** So long as the Agreement continues in effect:  
  
Minimum of \$2,500,000 (excluding from current liabilities the current portion of bank loans.) To the extent that the excess of current assets over current liabilities shall be less than such minimum, any unused balance of the amount permitted to be borrowed under the Agreement shall, for the purposes of this restriction, be included in current assets; but in no event shall current liabilities exceed current assets.

**Other Provisions:** So long as the Agreement continues in effect the consent of the bank is required for:

- (1) Mortgage or pledge of current assets or flight equipment;
- (2) Cash dividends on Common Stock to be paid out of earnings after December 31, 1954 plus \$3,750,000 of prior earnings;
- (3) Merger or consolidation;

TWA Ex. 5(b), Exhibit United-6  
Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: UNITED-6  
Sheet 2 of 2

Other  
Provisions:  
(continued)

- (4) Loans hereunder totaling more than 75% of the sum of flight equipment net of depreciation and cash deposits or advances on flight equipment ordered; and
- (5) Creation or guaranty of debt including debt under this Agreement, but excluding debt due in one year or less, if the aggregate amount of all debt thereafter outstanding would exceed the lesser of \$85,000,000 or net worth.

Note: This brief summary does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.

TWA Ex. 5(b), Exhibit United-7  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: UNITED-7

DIGEST

of

UAL DEBENTURE PURCHASE CONTRACT

of

December 1955

Parties: United Air Lines, Inc. and three insurance companies.

Designation: 4% Debentures, Series D, due February 1, 1981.

Dated: February 1, 1956.

Interest Payable: February 1 and August 1.

Amount: \$100,000,000 to \$120,000,000.

Closing Dates: Between February 1, 1956 and March 1, 1959; to be designated by UAL but with not more than two closings in each of the years 1956, 1957 and 1958, and with not more than one closing in 1959.

Amounts at Closings: To be designated by UAL within the following cumulative ranges:

<u>Minima</u>	<u>Maxima</u>	<u>By</u>
\$ 25,000,000	\$ 30,000,000	December 31, 1956
60,000,000	70,000,000	December 31, 1957
80,000,000	90,000,000	December 31, 1958
100,000,000	120,000,000	March 1, 1959

Takedowns: UAL was limited in such manner that it could have not more than two closings in each of the years 1956, 1957 and 1958, and not more than one takedown in 1959.

Commitment Fee: 1/2%. Payable August 1, 1956 and February 1 and August 1 thereafter on the unused portion.

Non-Refundability Period: 12 years.

Sinking Fund: To commence December 15, 1966; payable each year thereafter in the amount of 6-2/3% of aggregate amount issued. (Equals 100% pay-back over the last fifteen years of the 25-year term.)

Amendment of Trust Indenture: So as to substitute 10% for 25% and 25% for 60% as the margin required for Contractual Obligations for the purchase of Flight Equipment and Contractual Obligations for the purchase of Other Operating Property and Equipment, respectively, in the calculation of the "Asset Ratio".

Bank Credit Agreement: The obligation of the insurance companies was subject to UAL having entered into a credit agreement with banks for \$30,000,000.

Note: The above outline does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.

TWA Ex. 5(b), Exhibit United-8  
(Exhibits to Drexel Harriman Ripley, Inc. Report)

EXHIBIT: UNITED - 8

DIGEST  
of  
UAL BANK CREDIT AGREEMENT

Dated December 21, 1955

Amount: \$30,000,000.

Availability: Until December 31, 1960 in the form of Short-Term Notes.

Rate: Prime rate for Short-Term Notes. Prime rate plus 1/4% for the Long-Term Notes but not less than 3% nor more than 4%.

Maturities: Short-Term Notes to mature six months from date, but not later than December 31, 1960. Long-Term Notes, to be issued December 31, 1960 in the amount of the Short-Term Notes maturing December 31, 1960, to mature in twenty equal quarterly instalments commencing April 1, 1961.

Prepayment: Permitted without penalty on three days' notice unless prepayment is from proceeds of loans from other banks, in which case 1/4% per annum premium to maturity.

Commitment Fee: 1/4 of 1% per annum on unused portion of credit, payable quarterly April 1, etc.

Termination or Reduction of Commitment: Termination or reduction in multiples of \$1,000,000 permitted on five days' notice. Fee: 1/2% on unused portion.

Working Capital: So long as the Agreement is in effect:  
Minimum of \$2,500,000 (excluding from current liabilities the current portion of the bank loans. To the extent that the excess of current assets over current liabilities is less than \$2,500,000, any unused balance of the amount permitted to be borrowed under the Agreement shall, for the purposes of this restriction, be included in current assets; but in no event shall current liabilities exceed current assets.

Other Provisions: So long as the Agreement is in effect, the consent of the bank is required for:

- (1) Mortgage or pledge of current assets or flight equipment.
- (2)\* Cash dividends on Common Stock to be paid out of earnings after December 31, 1955 plus \$6,000,000 from prior earnings.
- (3) Merger or consolidation.
- (4) Total amount of borrowed money not to exceed \$200,000,000.
- (5) Asset Ratio of 105% required for any borrowing hereunder or elsewhere.

Note: This brief summary does not purport to be complete. Its only purpose is to set forth certain salient business information deemed of relevance to this report.

Source: Prepared by HRCO.



TWA Ex. 7(b)(1)  
(Price Waterhouse Study-Volume One)

TRANS WORLD AIRLINES, INC.

REPORT TO CAHILL, GORDON, REINDEL & OHL

ON

RECONSTRUCTION OF FINANCIAL STATEMENTS

FOR THE PERIOD SEPTEMBER 30, 1955 - DECEMBER 31, 1963

AND

CALCULATION OF PRESENT VALUE AS OF DECEMBER 31, 1963  
OF FUTURE PAYMENTS FOR DEBT SERVICE  
ON LONG-TERM DEBT

VOLUME I

Part 1 - Summary of procedures, assumptions  
and conclusions

Part 2 - Exhibits

T R A N S   W O R L D   A I R L I N E S ,   I N C .  
REPORT TO CAHILL, GORDON, REINDEL & OHL  
ON  
RECONSTRUCTION OF FINANCIAL STATEMENTS  
FOR THE PERIOD SEPTEMBER 30, 1955 - DECEMBER 31, 1963  
AND  
CALCULATION OF PRESENT VALUE AS OF DECEMBER 31, 1963  
OF FUTURE PAYMENTS FOR DEBT SERVICE  
ON LONG-TERM DEBT

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## PRICE WATERHOUSE &amp; CO.

60 BROAD STREET

NEW YORK 10004

May 2, 1966

Cahill, Gordon, Reindel & Ohl  
80 Pine Street  
New York, New York 10005

Dear Sirs:

In accordance with your instructions we have prepared the accompanying reconstructed financial data relating to Trans World Airlines, Inc. ("TWA") for the period September 30, 1955 - December 31, 1963. Such reconstructed financial data reflects the adjustment of the historical financial data of TWA for the period to give effect to the assumptions summarized in Section II and enumerated in Section V. In order to maintain consistency between the reconstructed and historical financial data, the adjustments to reflect the effect of these assumptions on the historical financial data for the period were made on bases which correspond in all material respects with the accounting methods which we understand were followed by TWA during such period.

We have also, in accordance with your instructions, calculated the present value, as at December 31, 1963, of future payments for debt service on the reconstructed and historical long-term debt of TWA set forth in Exhibit I B hereto. Section III enumerates the assumptions used for the purpose of these calculations and Exhibit VI summarizes the amounts thereof.

PART 1 - SUMMARY OF PROCEDURES, ASSUMPTIONS AND CONCLUSIONSSECTION I - SOURCES OF HISTORICAL FINANCIAL DATA

The historical financial data of TWA, on which the reconstructed financial data contained herein is based, was obtained from the following documents supplied to us by TWA:

- A. Consolidated financial statements of TWA for the years 1955 through 1963 as contained in the TWA annual reports to stockholders and in the related annual reports on Form 10-K prepared for filing with the U. S. Securities and Exchange Commission.
- B. Schedules (other than those prefixed T, G and D) comprising TWA's quarterly reports prepared on Form 41 for filing with the Civil Aeronautics Board for the periods commencing with July 1, 1955 and ending with December 31, 1963.

The information contained in the foregoing documents has been supplemented, to the extent we considered necessary for the purpose of preparing the accompanying reconstructed financial data, with underlying detailed information obtained by reference to TWA's books and records.

The foregoing documents and supplementary data were used by us solely for the purpose of this report and none of the information contained in such documents or data has been audited by us; accordingly, we do not express any opinion thereon. However, the consolidated financial statements of TWA referred to in A above were examined and reported on by another firm of independent public accountants and the annual historical financial statements included in this report (as Exhibits I-1 and II-1) have been reconciled to such audited financial statements.

## SECTION II - SUMMARY OF PRINCIPAL ASSUMPTIONS UNDERLYING RECONSTRUCTION OF FINANCIAL STATEMENTS

The principal assumptions which we have applied, in accordance with your instructions, in adjusting the historical financial data of TWA for the period September 30, 1955 - December 31, 1963 are summarized as follows:

1. TWA would not have purchased or leased aircraft from Hughes Tool Company ("HT Co.") and would not have received financing from HT Co. during the period under consideration, but instead would have acquired such aircraft directly from the manufacturers thereof through its own financing arrangements and resources.



2. TWA would have ordered in 1955 and 1956, and would have paid for, the 63 jet aircraft, consisting of 15 Boeing B131's, 18 Boeing B331's, and 30 Convair CV880's, actually ordered by HT Co. for delivery in 1959 and 1960, and related equipment. With respect to such aircraft:
  - (a) Whereas TWA received only 12 B331's out of the 18 ordered by HT Co., it would have received all 18 such aircraft.\*
  - (b) All Boeing aircraft would have been ordered earlier than they were ordered by HT Co., for delivery in accordance with Exhibit V hereto.
  - (c) All 30 Convairs would have been delivered to TWA on the contract delivery dates, whereas, historically, 20 were acquired subsequent to the contract delivery dates, 6 were not acquired until 1963 and the other 4 were never acquired by TWA.
3. The increase in gain from operations, before provisions for depreciation, obsolescence and amortization, for the years 1959 through 1963, had TWA acquired aircraft when and as described above, would have been as estimated by Coverdale & Colpitts in their report (Appendix B hereto).
4. The increased realization from sales of certain TWA piston aircraft, resulting from the changes in jet aircraft deliveries and delivery dates as in Paragraph 2 above, would have been as set forth in a summary schedule prepared by R. Dixon Speas Associates (Appendix E hereto).
5. TWA would have been financed as set forth in the report of Drexel Harriman Ripley, Incorporated (Appendix A hereto).

A detailed statement of the assumptions applied appears in Section V at the beginning of Volume II.

\* And, consequently, would not have, in 1962 and 1963, leased five B331B's and purchased related equipment.

SECTION III - CALCULATION OF PRESENT VALUE AS OF  
DECEMBER 31, 1963 OF FUTURE PAYMENTS FOR DEBT  
SERVICE ON LONG-TERM DEBT

The calculations summarized in Exhibit VI of present value of future payments for debt service on long-term debt are based on tables included in Financial Compound Interest and Annuity Tables\*, using the following assumptions supplied to us by you:

1. The use of an interest rate of 5-3/4%, compounded semiannually, which is the coupon rate on the historical TWA long-term debt issue closest to December 31, 1963, namely the 5-3/4% convertible subordinated debentures, issued in October and December 1963 and due in 1983.
2. The payment of debt service, including interest and principal payments to the sinking fund and at maturity, at the specified dates.
3. That there are no conversions of debentures into common stock.
4. That future payments relating to \$.5 million of instalment contracts for purchase of bulk storage and other facilities, outstanding at December 31, 1963 on both reconstructed and historical bases, are excluded from the calculations.
5. No effect is to be given to income taxes.

\* 3rd Edition, Financial Publishing Company, Boston, Mass., 1961.



SECTION IV - SUMMARY OF INCREASED INCOME AND EQUITY  
AND REDUCTION IN PRESENT VALUE OF FUTURE DEBT SERVICE

A summary of (A) the effect upon income and equity of the application to TWA's historical financial data for the period September 30, 1955 - December 31, 1963 of the assumptions summarized in Section II and enumerated in Section V and (B) the excess of historical over reconstructed present value as of December 31, 1963 of future payments for debt service (summarized on Exhibit VI) is as follows:

(A) Effect of application of assumptions:	
Increase in income and special items before provisions for income taxes(1)	\$ 71.7 million
Increase in capital surplus	12.3 million
Decrease in capital stock(2)	
Increase in stockholders' equity before income taxes(3)	<u>\$ 84.0 million</u>
(B) Excess of historical over reconstructed present value of future payments for debt service	
	<u>\$ 20.3 million</u>
Sum of (A) and (B)	<u>\$104.3 million</u>
(1) The net amount of the increase in income and special items, after provisions for current and deferred income taxes (in the amount of \$36.1 million), is \$35.6 million.	
(2) Amount is less than \$.05 million.	
(3) The increase in stockholders' equity, net after tax provisions, is \$47.9 million.	

The increase in income and special items represents the sum of: (i) the cumulative difference between the income (loss) and special items for the 8-1/4 year period ended December 31, 1963 as shown in reconstructed financial statements and the corresponding items on a historical basis, and (ii) the adjustments made as at September 30, 1955 to give effect to the 1955 equity financing set forth in the report of Drexel Harriman Ripley, Incorporated.

A statement of the reconstructed and historical results of operations for the period October 1, 1955 - December 31, 1963 is set forth on Exhibit II. The increase of \$71.7 million in income and

special items before provisions for current and deferred income taxes is analyzed on Exhibit IV on the basis of the individual assumptions enumerated in Section V.

The increase of \$12.3 million in capital surplus is accounted for by the difference between the net proceeds arising from the assumed 1955 equity financing and the net proceeds of the historical equity financing in 1957 as follows:

	Net <u>proceeds</u> (millions)
Assumed 1955 equity financing - 3,336,546 shares	\$55.5
Historical 1957 equity financing - 3,337,036 shares	<u>43.2</u>
	<u>\$12.3</u>

Since the number of shares of capital stock assumed to have been sold on June 1, 1955 was substantially the same as the number historically offered and sold by TWA in 1957 no difference arises between the reconstructed and historical capital stock accounts (as expressed in millions of dollars) at December 31, 1963.

Exhibit I presents a condensed statement of the reconstructed and historical financial positions of TWA at December 31, 1963. The factors which give rise to the increase of \$73.0 million in the balance of net current assets at December 31, 1963 on a reconstructed basis as compared with the historical net current asset position at that date are set forth in the comparative statement of sources and applications of funds for the period October 1, 1955 - December 31, 1963 (Exhibit III).

The reconstructed and historical present values as of December 31, 1963 of future payments for debt service are summarized by years on Exhibit VI.

\* \* \* \* \*

TWA Ex. 7(b)(1), page 7 of 9  
(Price Waterhouse Study - Volume One)

Volume II of this report sets forth the detailed assumptions used in arriving at the foregoing and describes the methods and procedures used by us in adjusting the historical financial data to give effect to such detailed assumptions. This volume also includes schedules which support the financial statements and show the effect of application of the assumptions.

Yours very truly,

*Price Waterhouse*

TWA Ex. 7(b)(1), page 8 of 9  
(Price Waterhouse Study - Volume One)

PART 2 - EXHIBITS

INDEX TO EXHIBITS

Primary exhibits:

- I - Reconstructed and historical statements of consolidated financial position - December 31, 1963
  - Notes to reconstructed and historical statements of consolidated financial position - December 31, 1963
- I A - Reconstructed and historical property and equipment (including expendable parts) and deposits with manufacturers - December 31, 1963
- I B - Reconstructed and historical long-term debt - December 31, 1963
- II - Reconstructed and historical statements of consolidated income and retained earnings for the period October 1, 1955 - December 31, 1963
- II A - Analysis of reconstructed and historical special charge in 1961 and special credit in 1963
- III - Reconstructed and historical statements of consolidated sources and applications of funds for the period October 1, 1955 - December 31, 1963
- III A - Reconstructed and historical summary of additions to property and equipment (including expendable parts) and deposits with manufacturers for the period October 1, 1955 - December 31, 1963
- IV - Summary of increases (decreases) in reconstructed over historical net income and special credit (charge) before income taxes - by assumption for the period October 1, 1955 - December 31, 1963
- V - Reconstructed and historical delivery and in-service dates - B131, B331 and CV880 jet aircraft
- VI - Reconstructed and historical future payments for debt service and present value of future payments at December 31, 1963 at 5-3/4% per annum compounded semiannually

PART 2 - EXHIBITS (Cont'd)

INDEX TO EXHIBITS (Cont'd)

Annual exhibits:

- I-1 - Reconstructed and historical statements of consolidated financial position - September 30, 1955 and December 31, 1955-63
- I A-1 - Reconstructed and historical property and equipment (including expendable parts) and deposits with manufacturers - September 30, 1955 and December 31, 1955-63
- II-1 - Reconstructed and historical statements of consolidated income and retained earnings for the period October 1, 1955 - December 31, 1963
- III-1 - Reconstructed and historical statements of consolidated sources and applications of funds for the period October 1, 1955 - December 31, 1963



TWA Ex. 7(b)(1), Exhibit I, page 1 of 2  
(Price Waterhouse Study - Volume One)

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL STATEMENTS  
OF CONSOLIDATED FINANCIAL POSITION

DECEMBER 31, 1963

(Amounts in millions)

			Increase (decrease over
	<u>Reconstructed</u>	<u>Historical</u>	<u>historical</u>
Net current assets <u>Exhibit III</u>	\$105.4	\$ 32.4	\$73.0
Net property and equipment (including expendable parts) and deposits with manufacturers <u>Exhibit IA</u>	401.8	377.2	24.6
Funds restricted for flight equipment purchases - other	.3	3.1	(2.8)
Investments and long-term prepayments	4.0	4.3	(.3)
Total tangible assets, less current liabilities	<u>511.5</u>	<u>417.0</u>	<u>94.5</u>
Noncurrent liabilities and deferred credits:			
Long-term debt <u>Exhibit IB</u>	320.5	310.8	9.7
Other noncurrent liabilities	1.2	1.2	
Deferred gain on instalment sales of aircraft	.2	.2	
Deferred federal income taxes	42.4	5.9	36.5
Total noncurrent liabilities and deferred credits	<u>364.3</u>	<u>318.1</u>	<u>46.2</u>
Total tangible assets, less liabilities and deferred credits	<u>147.2</u>	<u>98.9</u>	<u>48.3</u>
Deferred debits - unamortized portion:			
Long-term debt expense	1.7	1.7	
Training and other costs applicable to new aircraft	.7	1.1	(.4)
Costs relating to new overhaul base and other	.3	.3	
Total deferred debits	<u>2.7</u>	<u>3.1</u>	<u>(.4)</u>
Excess of assets over liabilities and deferred credits	<u>\$149.9</u>	<u>\$102.0</u>	<u>\$47.9</u>
Stockholders' equity:			
Capital stock	\$ 33.5	\$ 33.5	
Capital surplus	61.6	49.3	\$12.3
Retained earnings <u>Exhibit II</u>	<u>54.8</u>	<u>19.2</u>	<u>35.6</u>
Total stockholders' equity	<u>\$149.9</u>	<u>\$102.0</u>	<u>\$47.9</u>

See notes attached hereto.



TRANS WORLD AIRLINES, INC.NOTES TO RECONSTRUCTED AND HISTORICAL STATEMENTS  
OF CONSOLIDATED FINANCIAL POSITIONDECEMBER 31, 1963

1. The foregoing statements should be read in conjunction with the notes to financial statements set forth on page 23 of the 1963 annual report of TWA, insofar as they relate to the 1963 statement of financial position.
2. On a reconstructed basis the portions of Note 4 set forth on page 23 of the 1963 annual report of TWA relating to the statement of financial position would be amended to read as follows:

"For purposes of reconstructed federal income taxes accelerated methods of depreciation have been used in lieu of the straight-line method of depreciation used for accounting purposes.

"Reconstructed costs of training flight crews and other costs incurred in connection with the acquisition and integration of new types of aircraft and other expenses related to future periods have been deferred for accounting purposes but have been considered as tax deductions in the year incurred. The definition of costs to be deferred and the period of amortization were revised at December 31, 1963 as stated on page 5 of the 1963 annual report to shareholders.

"The computed reconstructed investment credits available at December 31, 1963 and applicable to reconstructed property additions for 1962 and 1963 amount to \$7.9 million and \$.2 million, respectively. Since on a reconstructed basis TWA has a loss carry-forward for income tax purposes, no benefit was considered to be derived from these direct tax credits which would thus be available for offset against federal income taxes in future years. At December 31, 1963 the reconstructed loss carry-forward for tax purposes aggregated approximately \$5.6 million and would expire in 1969. All of this loss carry-forward relates to the foregoing differences between recorded expenses and tax deductions claimed; accordingly, appropriate provisions for deferred taxes would be made when this loss carry-forward is applied to offset income which otherwise would be taxable. TWA would not be required to pay any federal income taxes until the entire loss carry-forward has been equalled by future taxable income."

3. On a reconstructed basis, the first paragraph of Note 5 set forth on page 23 of the 1963 annual report of TWA would be amended to read as follows:

"On a reconstructed basis, at December 31, 1963 TWA operated two jet cargo aircraft and related engines under short-term leases (annual rental approximately \$2.7 million) with options to purchase the aircraft and engines."

TRANS WORLD AIRLINES, INC.RECONSTRUCTED AND HISTORICAL PROPERTY AND  
EQUIPMENT (INCLUDING EXPENDABLE PARTS)  
AND DEPOSITS WITH MANUFACTURERSDECEMBER 31, 1963

(Amounts in millions)

	<u>Reconstructed</u>	<u>Historical</u>	<u>Increase (decrease) over historical</u>
Deposits with manufacturers	\$ 29.7	\$ 29.7	
Flight equipment, at cost	628.4	563.9	\$64.5
Expendable parts, at cost	24.2	19.8	4.4
	<u>652.6</u>	<u>583.7</u>	<u>68.9</u>
<u>Less</u> - Reserves for depreciation and obsolescence:			
Flight equipment	308.7	264.3	44.4
Expendable parts	7.6	6.8	.8
	<u>316.3</u>	<u>271.1</u>	<u>45.2</u>
Net flight equipment and expendable parts	<u>336.3</u>	<u>312.6</u>	<u>23.7</u>
Construction work in progress - flight equipment, at cost	.5	.4	.1
Total	<u>366.5</u>	<u>342.7</u>	<u>23.8</u>
Ground property and equipment, at cost	61.3	59.4	1.9
<u>Less</u> - Reserves for depreciation	28.9	27.8	1.1
	<u>32.4</u>	<u>31.6</u>	<u>.8</u>
Construction work in progress - ground property and equipment, at cost	2.8	2.8	
Nonoperating property and equipment	4.1	4.1	
<u>Less</u> - Reserve for depreciation	4.0	4.0	
	<u>.1</u>	<u>.1</u>	
Net property and equipment (including expendable parts) and deposits with manufacturers	<u>\$401.8</u>	<u>\$377.2</u>	<u>\$24.6</u>

Source: Exhibit I A-1

RECONSTRUCTED AND HISTORICAL LONG-TERM DEBTDECEMBER 31, 1963

(Amounts in millions)

Reconstructed

Subordinated Debentures, 5% due June 1, 1984; annual sinking fund payments of \$3.0 million starting June 1, 1970. Convertible into common stock at any time prior to June 1, 1969 at \$18.50 per share	\$ 60.0
Flight Equipment Mortgage Notes: Series A, 4% due October 1, 1980; equal annual sinking fund payments starting October 1, 1965 to retire 100% by maturity	170.0
Series B, 6% due July 1, 1984; equal annual sinking fund payments starting July 1, 1969 to retire 100% by maturity	90.0
Instalment contracts for purchase of bulk storage and other facilities, final payment due in 1971	.5
<b>Total</b>	<b><u>\$320.5</u></b>

Historical

Subordinated Income Debentures, 6-1/2% due June 1, 1978; annual sinking fund payments in an amount equal to one tenth of the aggregate principal amount outstanding on June 30, 1973 are required each November 30 from 1973 to 1977, inclusive	\$1
Equipment Mortgage Sinking Fund Notes: 6-1/2% due December 31, 1972; annual sinking fund payments required starting December 31, 1965 sufficient to redeem \$11,600,000 principal plus accrued interest	
Series B, 6% due December 31, 1977; annual sinking fund payments required starting December 31, 1967 sufficient to redeem \$10,000,000 principal plus accrued interest	
Convertible Subordinated Debentures, 5-3/4% due October 1, 1983; annual sinking fund payments or prior cancellation of converted bonds sufficient to retire \$1,800,000 principal amount are required each September 30 starting in 1973. Convertible into common stock at \$22 per share	
Instalment contracts for purchase of bulk storage and other facilities, final payment due in 1971	
<b>Total</b>	<b><u>\$1</u></b>

Note - Under the most restrictive of the provisions of the Indentures relating to the foregoing long-term debt, the amount available at December 31, 1963 for cash dividends and redemption of stock is restricted to "earnings from December 31, 1958 onward plus a reasonable 'cushion,' plus net proceeds from sale of additional stock."

Note - Certain provisions of the Fourth Supplemental Indenture dated as of December 1, 1963 issued in connection with Equipment Mortgage Sinking Fund Notes will not presently permit the payment of cash dividends. During December 1963, in accordance with the provisions of the revolving credit agreement described on page 6 of the annual report to shareholders, TWA paid all of the then outstanding Equipment Mortgage Serial Notes. Stock purchase warrants originally attached to the Subordinated Income Debentures authorize purchase of 2,700,000 shares of stock at \$20 a share to June 1, 1965 and at \$22 a share thereafter to December 1, 1973.

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL STATEMENTS OF  
CONSOLIDATED INCOME AND RETAINED EARNINGS

FOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

			Increase (decrease) over
	<u>Reconstructed</u>	<u>Historical</u>	<u>historical</u>
Income from operations before provisions for depreciation, obsolescence and amortization	\$501.5	\$378.4	\$123.1
Provisions for depreciation and obsolescence	339.3	291.4	47.9
Provisions for amortization of:			
training and other costs applicable to new aircraft	30.2	24.8	5.4
Cost of move to overhaul base and other	3.6	3.6	
	<u>373.1</u>	<u>319.8</u>	<u>53.3</u>
Gain from operations	128.4	58.6	69.8
Income on sales or retirements of property and equipment - net	8.1	8.6	(.5)
Other income credits - net	6.9	12.1	(5.2)
Income before interest and income taxes	143.4	79.3	64.1
Interest expense	79.5	75.5	4.0
Income before income taxes	<u>63.9</u>	<u>3.8</u>	<u>60.1</u>
Provisions for income taxes:			
current taxes (refunds)	(9.7)	(9.3)	(.4)
deferred federal income taxes	44.1	4.8	39.3
adjustments of prior years taxes	(1.4)	(1.4)	
Total provisions for income taxes	<u>33.0</u>	<u>(5.9)</u>	<u>38.9</u>
Net income	<u>30.9</u>	<u>9.7</u>	<u>21.2</u>
Special charge - net	(18.1)	(29.7)	11.6
Applicable deferred federal income taxes	8.6	5.8	2.8
Net special charge <u>Exhibit II A</u>	<u>(9.5)</u>	<u>(23.9)</u>	<u>14.4</u>
Net income and special charge - net	21.4	(14.2)	35.6
Retained earnings beginning of period	33.3	33.3	
Timing differences	.1	.1	
Retained earnings end of period <u>Exhibit I</u>	<u>\$ 54.8</u>	<u>\$ 19.2</u>	<u>\$ 35.6</u>
Summary of increase in income and special charge for periods ended December 31, 1963, before provisions for income taxes relating thereto:			
Income before taxes	\$ 63.9	\$ 3.8	\$ 60.1
Special charge - net	<u>(18.1)</u>	<u>(29.7)</u>	<u>11.6</u>
	<u>\$ 45.8</u>	<u>(\$ 25.9)</u>	<u>\$ 71.7</u>



TRANS WORLD AIRLINES, INC.ANALYSIS OF RECONSTRUCTED AND HISTORICAL SPECIAL CHARGE  
IN 1961 AND SPECIAL CREDIT IN 1963

(Amounts in millions)

	<u>Reconstructed</u>	<u>Historical</u>	<u>Decrease from historical</u>
1961 special charge:-			
Revision of service lives and residual values of piston aircraft and related equipment:			
Flight equipment			
Provision for depreciation of five repossessed aircraft (included in basis for calculation of reconstructed bad debts)		\$ 2.7	\$ 2.7
Provision for depreciation of aircraft with earlier sales dates		.6	.6
Provision for depreciation of piston aircraft with lower capital expenditures		.2	.2
Provision for depreciation of other flight equipment	\$21.7	21.7	
Total	21.7	25.2	3.5
Provision for depreciation of ground property and equipment	.4	.4	
Provision for obsolescence of expendable parts	.4	.4	
	22.5	26.0	3.5
Losses incurred during 1961 on the sale of L1049H and L1649A aircraft (a)	.2	3.6	3.4
Excess of receivable over net book value at time of sale of aircraft being repossessed (included in basis for calculation of reconstructed bad debts)		.2	.2
Write-off of L1649A training and other costs	.1	.1	
Total charge	22.8	29.9	7.1
Less - Deferred federal income tax applicable thereto	11.0	5.9	(5.1)
Net special charge	\$11.8	\$24.0	\$12.2

(a) For purposes of funds statements, Exhibit III, these amounts are included in net book value of property and equipment sold or retired.

Increase  
(decrease)  
overReconstructed Historical historical

1963 special (credit) (accounting policy changes):-  
Establishment of inventory of certain expendable  
parts  
Less - Reserve for obsolescence

(\$ 4.1)	(\$ 3.2)	\$ .9
<u>1.5</u>	<u>1.3</u>	<u>.2</u>
<u>(2.6)</u>	<u>(1.9)</u>	<u>.7</u>

Write-off of undepreciated portion of interest  
capitalized in prior years on deposits with  
manufacturers:

Not transferred to flight equipment  
Transferred to flight equipment

	.3	(.3)
<u>9.1</u>	<u>1.9</u>	<u>7.2</u>

Less - Depreciation previously recorded

9.1	2.2	6.9
<u>(3.2)</u>	<u>(.3)</u>	<u>(2.9)</u>
<u>5.9</u>	<u>1.9</u>	<u>4.0</u>

Write-off of deferred training and other costs  
applicable to new aircraft

<u>9.7</u>	<u>11.4</u>	<u>(1.7)</u>
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Elimination of reserve for overhaul of jet aircraft

<u>(17.7)</u>	<u>(11.6)</u>	<u>6.1</u>
---------------	---------------	------------

Total

<u>(4.7)</u>	<u>(.2)</u>	<u>4.5</u>
--------------	-------------	------------

Less - Deferred federal income tax  
applicable thereto

<u>2.4</u>	<u>.1</u>	<u>2.3</u>
------------	-----------	------------

Net special credit

<u>(\$ 2.3)</u>	<u>(\$ .1)</u>	<u>\$ 2.2</u>
-----------------	----------------	---------------

Primary 1961 special charge and 1963 special credit:  
Total special charges and (credits)

\$18.1	\$29.7	\$11.6
--------	--------	--------

Less - Deferred federal income taxes applicable  
thereto

<u>8.6</u>	<u>5.8</u>	<u>2.8</u>
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Special charges and credits, less  
applicable federal tax effect

<u>\$ 9.5</u>	<u>\$23.9</u>	<u>\$14.4</u>
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TRANSRECONSTRUCTED AND HISTORICAL STATEMENTS OF CONSOLIDATED  
SOURCES AND APPLICATIONS OF FUNDSFOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

	<u>Reconstructed</u>	<u>Historical</u>	<u>Incr (decr ov histo</u>
<b>Sources of funds:-</b>			
Funds provided by operations:			
Net income (loss) and special charge - net	\$ 21.4	(\$ 14.2)	\$ 35
Add back charges not involving use of funds -			
Provisions for depreciation and obsolescence	339.3	291.4	47
Provisions for amortization of -			
Training and other costs applicable to new aircraft	30.2	24.8	5
Cost of move to overhaul base and other	3.6	3.6	
Provisions for deferred federal income taxes included in -			
Net income	44.1	4.8	39
Special (charge) - net	(8.6)	(5.8)	(2)
Net change in reserve for overhaul of jet aircraft	17.7	11.6	6
Portion of 1961 and 1963 special credit (charge) not involving use of funds	17.9	26.1	(8)
Total funds provided by operations	465.6	342.3	123
Additions to long-term debt	321.6	703.9	(382)
Reclassification from current to deferred federal income taxes	1.0	1.0	
Sale of capital stock	56.0	43.7	12
Net book value of property and equipment sold or retired	34.3	26.6	7
Total sources of funds	878.5	1,117.5	(239)
<b>Applications of funds:</b>			
Additions to property and equipment	704.3	624.6	79
Net change in funds restricted for flight equipment purchases - other	.6	3.3	(2)
Deferrals of training and other costs applicable to new aircraft	40.7	37.4	3
Reductions in long-term debt	36.1	428.1	(392)
Net change in long-term debt expense	1.7	1.7	
Net change in investments and long-term prepayments	.6	.9	(
Net change in deferred gain on instalment sales of aircraft	(.2)	(.2)	
Other changes - net	.1	.1	
Total applications of funds	783.9	1,095.9	(312)
Excess of funds provided over funds applied resulting in an increase in net current assets	94.6	21.6	73
Net current assets, beginning of period	10.8	10.8	
Net current assets, end of period	\$105.4	\$ 32.4	\$ 73

Source: Exhibit III-1

(Price Waterhouse Study - Volume One)  
TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL SUMMARY OF ADDITIONS TO PROPERTY AND  
EQUIPMENT (INCLUDING EXPENDABLE PARTS) AND DEPOSITS WITH  
MANUFACTURERS FOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

	Number of aircraft		Additions		Increase (decrease) over historical
	R	H	R	H	
Current fleet (a):					
B131	15	15	\$ 84.7	\$ 75.4	\$ 9.3
B331	18	12	124.1	83.5	40.6
B331B (leased)		5		7.1	(7.1)
CV880 (new)	30	20	139.0	96.5	42.5
CV880 (used)		6		16.3	(16.3)
B131B	18	18	113.5	113.5	
B720B (leased)	4	4	.8	.8	
B727 (on order)			18.2	18.2	
B331C (on order) (b)			.1	.1	
B373C (leased)	2	2	.8	.8	
Deposits for future fleets			11.6	11.6	
Total			492.8	423.8	69.0
Current fleet (a):-					
Aircraft and spare engines:					
L1649A	25	25	68.4	69.5	(1.1)
L1049G	8	8	17.2	17.3	(.1)
L1049H	4	4	8.7	8.7	
L1649A	4	4	11.6	11.6	
Deposits with manufacturers			(.2)	(.2)	
Rotable parts and other flight equipment			18.4	18.4	
Total			124.1	125.3	(1.2)
Other additions:-					
Capitalized interest on deposits with manufacturers			9.1	2.2	6.9
Net increase in expendable parts			20.1	16.6	3.5
Ground property and equipment			51.9	50.0	1.9
Nonoperating property and equipment			4.1	4.6	(.5)
Net increase in construction work in progress:					
Flight equipment			.2	.1	.1
Ground property and equipment			2.0	2.0	
Total			87.4	75.5	11.9
Total additions			\$704.3	\$624.6	\$79.7
(a) Excluding interest capitalized and net increases in expendable parts and flight equipment construction work in progress, included in other additions.					
(b) Deposits of \$7.6 million on this fleet are included with deposits for future fleets.					
and: reconstructed					

TWA Ex. 7(b)(1), Exhibit V, page 1 of 2  
(Price Waterhouse Study - Volume One)

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL DELIVERY AND IN-SERVICE DATES  
B131, B331 AND CV880 JET AIRCRAFT

Delivery dates

In-service dates

Reconstructed

Historical

Reconstructed

Historical

B131 jet aircraft

November 30, 1958	January 29, 1959	April 15, 1959	July 9, 1959
December 31, 1958	March 17, 1959	January 6, 1959	March 20, 1959
January 31, 1959	March 30, 1959	February 6, 1959	April 2, 1959
February 27, 1959	April 3, 1959	March 6, 1959	April 4, 1959
March 30, 1959	April 18, 1959	April 5, 1959	April 24, 1959
April 3, 1959	April 29, 1959	April 9, 1959	May 1, 1959
April 18, 1959	May 10, 1959	April 24, 1959	May 27, 1959
May 10, 1959	May 13, 1959	May 16, 1959	May 29, 1959
May 13, 1959	May 24, 1959	May 19, 1959	May 29, 1959
May 24, 1959	May 28, 1959	May 30, 1959	June 1, 1959
May 28, 1959	June 13, 1959	June 3, 1959	July 7, 1959
June 13, 1959	July 1, 1959	June 19, 1959	July 12, 1959
June 29, 1959	July 10, 1959	July 5, 1959	July 12, 1959
July 10, 1959	July 14, 1959	July 16, 1959	July 29, 1959
July 27, 1959	August 1, 1959	August 2, 1959	August 4, 1959

B331 jet aircraft

July 19, 1959	November 10, 1959	August 19, 1959	November 23, 1959
August 22, 1959	November 10, 1959	September 4, 1959	December 3, 1959
August 28, 1959	November 25, 1959	September 9, 1959	December 9, 1959
September 22, 1959	December 23, 1959	October 5, 1959	January 9, 1960
October 6, 1959	January 18, 1960	October 19, 1959	February 25, 1960
October 27, 1959	April 1, 1960	November 10, 1959	April 24, 1960
November 5, 1959	April 5, 1960	November 19, 1959	May 11, 1960
November 10, 1959	April 14, 1960	November 23, 1959	April 28, 1960
November 15, 1959	May 9, 1960	December 28, 1959	May 19, 1960
November 30, 1959	May 25, 1960	January 12, 1960	May 28, 1960
January 18, 1960	July 1, 1960	January 31, 1960	July 4, 1960
January 29, 1960	July 1, 1960	March 13, 1960	July 6, 1960
March 23, 1960	(a)	April 5, 1960	(a)
April 26, 1960	(a)	May 9, 1960	(a)
April 29, 1960	(a)	May 12, 1960	(a)
May 9, 1960	(a)	May 22, 1960	(a)
May 8, 1960	(a)	June 20, 1960	(a)
May 1, 1960	(a)	July 14, 1960	(a)

Delivery datesIn-service datesReconstructedHistoricalReconstructedHistoricalCV880 jet aircraft

November 15, 1959	May 18, 1960	July 13, 1960	January 14, 1960
December 15, 1959	(a)	May 15, 1960	(a)
January 15, 1960	January 1, 1961	May 15, 1960	January 12, 1960
February 15, 1960	January 5, 1961	May 15, 1960	January 12, 1960
February 15, 1960	(a)	May 15, 1960	(a)
March 15, 1960	January 6, 1961	May 15, 1960	January 12, 1960
March 15, 1960	January 8, 1961	May 15, 1960	January 12, 1960
April 15, 1960	January 12, 1961	May 15, 1960	January 22, 1960
April 15, 1960	January 21, 1961	May 15, 1960	January 25, 1960
April 15, 1960	(a)	May 15, 1960	(a)
May 15, 1960	February 2, 1961	May 25, 1960	February 10, 1960
May 15, 1960	February 15, 1961	May 25, 1960	March 16, 1960
May 15, 1960	(a)	May 25, 1960	(a)
June 15, 1960	March 15, 1961	June 25, 1960	March 30, 1960
June 15, 1960	March 18, 1961	June 25, 1960	April 14, 1960
June 15, 1960	(a)	June 25, 1960	(a)
June 15, 1960	(a)	June 25, 1960	(a)
July 15, 1960	March 20, 1961	July 25, 1960	April 1, 1960
July 15, 1960	April 26, 1961	July 25, 1960	April 30, 1960
July 15, 1960	May 6, 1961	July 25, 1960	May 20, 1960
July 15, 1960	(a)	July 25, 1960	(a)
July 15, 1960	May 25, 1961	July 25, 1960	June 1, 1960
August 15, 1960	June 9, 1961	August 25, 1960	June 15, 1960
August 15, 1960	July 9, 1961	August 25, 1960	July 19, 1960
August 15, 1960	August 10, 1961	August 25, 1960	August 18, 1960
August 15, 1960	(a)	August 25, 1960	(a)
August 15, 1960	(a)	August 25, 1960	(a)
September 15, 1960	September 2, 1961	September 25, 1960	September 8, 1960
September 15, 1960	October 13, 1961	September 25, 1960	October 20, 1960
September 15, 1960	(a)	September 25, 1960	(a)

- (a) Aircraft not delivered historically to TWA. These include: (1) Six B-331 jet aircraft ordered by HT Co. but thereafter diverted to Pan American World Airways, Inc. and delivered thereto on November 5, 1959, December 15, 1959, December 30, 1959, March 23, 1960, April 29, 1960 and June 8, 1960 respectively; (2) Six CV880 jet aircraft ordered by HT Co. but thereafter delivered to Northeast Airlines, Inc. on November 30, 1960, December 5, 1960, December 8, 1960, December 14, 1960, January 21, 1961 and January 30, 1961 respectively, pursuant to a lease agreement between Convair and Northeast (subsequently these six aircraft were repossessed by Convair and sold to TWA with deliveries to TWA occurring in the period July - September, 1963); (3) Four CV880 jet aircraft ordered by HT Co. and retained by it.

Sources:

1. Historical and Reconstructed delivery dates derived from the testimony of R. W. Rummel and Exhibits and Annexes thereto;
2. Historical and Reconstructed In-Service dates furnished by Coverdale & Colpitts, Appendix C attached.



TWA Ex. 7(b)(2)  
(Price Waterhouse Study - Volume Two)

TRANS WORLD AIRLINES, INC.

REPORT TO CAHILL, GORDON, REINDEL & OHL

ON

RECONSTRUCTION OF FINANCIAL STATEMENTS  
FOR THE PERIOD SEPTEMBER 30, 1955 - DECEMBER 31, 1963

AND

CALCULATION OF PRESENT VALUE AS OF DECEMBER 31, 1963  
OF FUTURE PAYMENTS FOR DEBT SERVICE  
ON LONG-TERM DEBT

VOLUME II

Detailed Assumptions and their Application,  
Schedules and Appendices

PRICE WATERHOUSE & CO.

TRANS WORLD AIRLINES, INC.

REPORT TO CAHILL, GORDON, REINDEL & OHL

ON

RECONSTRUCTION OF FINANCIAL STATEMENTS

FOR THE PERIOD SEPTEMBER 30, 1955 - DECEMBER 31, 1963

AND

CALCULATION OF PRESENT VALUE AS OF DECEMBER 31, 1963  
OF FUTURE PAYMENTS FOR DEBT SERVICE  
ON LONG-TERM DEBT

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SECTION V - DETAILED STATEMENT OF ASSUMPTIONS  
USED IN RECONSTRUCTION OF FINANCIAL STATEMENTS

Listed below are the detailed assumptions which, in accordance with your instructions to us, we have followed in adjusting the historical financial data of TWA for the period September 30, 1955 - December 31, 1963.

Assumptions derived from the  
Drexel Harriman Ripley,  
Incorporated report: -

The assumptions set forth in Paragraphs A, B and C below are all derived from the report prepared by the investment banking firm, Drexel Harriman Ripley, Incorporated (Harriman Ripley), for use in this proceeding (Appendix A hereto).

A. 1955 equity financing:

1. On June 1, 1955, 3,336,546 shares of capital stock are to be sold at \$17.50 per share. Net proceeds after underwriting fees and expenses are assumed to be \$55.5 million.

2. The proceeds are to be used to:

a. Redeem \$35.0 million principal amount of 3-3/4% Equipment Mortgage Sinking Fund Bonds on July 1, 1955.

b. Reimburse Hughes Tool Company (HT Co.) on June 1, 1955 for \$16.8 million of deposits with Lockheed Aircraft Corporation (Lockheed) for twenty-five L1649A aircraft, plus interest on such amount for five months at 3% or \$.2 million.

c. Deposit \$2.4 million with Lockheed on September 29, 1955 pursuant to a contract for five L1049G aircraft.

3. As a consequence of the 1955 equity financing the effect of the sale in 1957 of 3,337,036 shares of capital stock at \$13.00 per share is to be eliminated from the historical financial statements. Net proceeds to TWA were \$43.2 million.

B. Reconstructed long-term debt:

1. Flight equipment mortgage -

a. TWA is to enter into a loan agreement dated October 1, 1955 relating to Series A flight equipment mortgage notes (minimum amount - \$10.0 million; maximum amount - \$170.0 million).



b. TWA is to enter into a loan agreement dated July 1, 1959 relating to Series B flight equipment mortgage notes (minimum amount - \$90.0 million; maximum amount - \$110.0 million).

c. Proceeds amounting to \$50.0 million each on October 1, 1955, July 1, 1956 and April 1, 1957 and \$20.0 million on January 1, 1958 from flight equipment mortgage notes, Series A, 4% are to be deposited in the flight equipment fund.

d. Proceeds amounting to \$50.0 million on October 1, 1959 and \$40.0 million on April 1, 1960 from flight equipment mortgage notes, Series B, 6% are to be deposited in the flight equipment fund.

e. Interest and commitment fees are to be calculated and paid in accordance with the terms of the flight equipment mortgage and the related mortgage notes.

f. Total agency fee and estimated other expenses of issue are to be assumed as .183% of the maximum amount, or \$.3 million for Series A and \$.2 million for Series B.

g. Moneys are to be drawn down from the flight equipment fund in accordance with the provisions of the 1955 flight equipment mortgage relating thereto.

2. Subordinated debentures, 5% -

a. On June 1, 1959, the net proceeds of \$58.4 million from an issue of \$60.0 million of subordinated debentures are to be received and deposited in the general funds.

b. Interest is to be calculated and paid in accordance with the terms of the debentures.

c. Total underwriting expenses and other expense of issue are to be \$1.6 million.

d. Debentures are to be convertible into common stock at any time prior to June 1, 1969. There are to be no conversions through December 31, 1963.

C. Elimination of historical debt financing:

1. The debt financing program, referred to in Assumption B above, is to be considered as a substitute for the entire amount of debt financing, both long-term and short-term, reflected in the historical financial statements, except for minor amounts relating to instalment contracts for purchase of bulk storage and other facilities which are to remain unchanged.

2. Amounts for interest, commitment fees and debt expense, if any, relating to the eliminated historical debt are to be excluded.

Assumption derived from the Coverdale & Colpitts report: -

D. Gain (loss) from operations before provisions for depreciation, obsolescence and amortization:

Gain (loss) from operations before provisions for depreciation obsolescence and amortization is to be reconstructed to give effect to changes estimated by Coverdale & Colpitts, consulting engineers, in their report which has been prepared for use in this proceeding (Appendix B hereto).

Other assumptions: -

E. Capital expenditures for property and equipment:

1. Derived from Harriman Ripley report: "Capital expenditures" are to include the investment in flight equipment expendable parts in accordance with the flight equipment mortgage described in the Harriman Ripley report (Appendix A hereto); accordingly, expendable parts are to be classified with property and equipment for the entire period.

2. Derived from TWA's historical policy: The reconstructed cost of jet flight equipment is to include capitalized interest on funds deposited with aircraft and engine manufacturers (to the extent such deposits are financed from borrowed funds) from date of deposit to date of delivery of aircraft and engines.



3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- a. That the piston aircraft which TWA historically acquired from or through HT Co. during 1956-1958 were instead acquired directly from Lockheed; no change in dates of delivery is assumed.
- b. That TWA acquired, directly from Boeing and on the earlier delivery dates set forth in the schedule of "Reconstructed and historical delivery and in-service dates - B131, B331, and CV880 jet aircraft" (Exhibit V) annexed hereto, each of the 33 Boeing aircraft which HT Co. ordered in 1956, as follows:
  - (i) 15 B131 jet aircraft historically leased and subsequently purchased from HT Co.
  - (ii) 12 B331 jet aircraft historically acquired which consisted of:
    - 4 B331 jet aircraft historically leased and subsequently purchased from HT Co.
    - 1 B331 jet aircraft historically purchased from HT Co.
    - 7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon; and
  - (iii) 6 B331 jet aircraft historically delivered to another airline.
- c. That, since TWA would have acquired the 6 B331 jet aircraft ordered by HT Co. but historically delivered to another airline, TWA did not enter into a contract with Boeing dated April 30, 1961 to purchase 6 B331B jet aircraft, did not modify that contract by letter agreement dated December 1, 1961 to provide for the leasing of 5 B331B jet aircraft from Boeing and did not lease 5 B331B aircraft from Boeing in 1962 and 1963. In addition, that TWA did not lease and subsequently purchase the related complement of 20 engines for such 5 B331B aircraft and did not incur any other capital expenditures relating to these aircraft.
- d. That TWA acquired directly from Convair and at the dates shown in Exhibit V all 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956 (20 of which were historically acquired by TWA in 1960 and 1961 and 6 of which were historically acquired in a used condition by TWA in 1963).

The adjusted timing of reconstructed expenditures for rotatable parts for the CV880 fleet is as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

e. That expenditures for certain ground property and equipment relating to or resulting from the changes in TWA's jet fleet described above were reconstructed as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

f. That TWA acquired directly from suppliers certain customer-furnished equipment and rotatable and expendable parts for jet aircraft which were originally acquired by HT Co. That such acquisitions were made on the dates that suppliers' invoices were transmitted by TWA to HT Co. for payment.

g. Provisions for depreciation and obsolescence:

1. Derived from TWA's historical policy: The TWA accounting policies relating to methods of depreciation, service lives and residual values of depreciable assets are to be the same as those followed historically during the period.

2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes which also appear as parts of Assumption E) in capital expenditures and service dates relating to:

a. Piston aircraft assumed to have been acquired during 1956-1958 directly from Lockheed.

b. 15 B131 jet aircraft historically leased and subsequently purchased from HT Co. which are assumed to be acquired by TWA directly from Boeing.

c. 12 B331 jet aircraft which are assumed to be acquired by TWA directly from Boeing and which historically consisted of:

4 B331 jet aircraft historically leased and subsequently purchased from HT Co.

1 B331 jet aircraft historically purchased from HT Co.

7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon, and

6 B331 jet aircraft which are assumed to have been acquired directly by TWA from Boeing and which historically were delivered to another airline.

- d. 5 B331B jet aircraft which are assumed not to have been leased in 1962 and 1963. In addition, 20 engines for such aircraft are assumed not to be leased and subsequently purchased and no other capital expenditures are assumed to be incurred.
- e. 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956 (20 of which were historically acquired by TWA in 1960 and 1961 and 6 of which were historically acquired in a used condition by TWA in 1963).
- f. The assumed earlier and additional expenditures for certain ground property and equipment relating to or resulting from the changes in TWA's jet fleet which were reconstructed as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

G. Gain (loss) on sales or retirements of property and equipment and collection of related proceeds:

1. Derived from R. Dixon Speas Associates report and from Assumptions E and F: The gain (loss) on sales or retirements of property and equipment is to be reconstructed to give effect to:

- a. The reconstructed sales dates and contract values for 103 piston aircraft as set forth in the report and a related schedule prepared for use in this proceeding by R. Dixon Speas Associates (RDSA), consultants in airline operations, and constituting Appendices D and E hereto.
- b. Reconstructed capital expenditures and reconstructed provisions for depreciation, as applicable.

2. Derived from TWA's collection experience: The amount and timing of collections of proceeds from sales or retirements of property and equipment are to be reconstructed based upon average historical collection experience relating to such property and equipment.

H. Deferred training and other costs applicable to new aircraft:

The amount and timing of expenditures for and amortization deferred training and other costs applicable to new aircraft ("deferred training costs") are to be adjusted to give effect to the following assumptions (which also appear as parts of Assumption E3):



a. That TWA acquired, directly from Boeing and on the earlier delivery dates set forth in the schedule of "Reconstructed and historical delivery and in-service dates - B131, B331, and CV880 jet aircraft" (Exhibit V) annexed hereto, each of the 33 Boeing aircraft which HT Co. ordered in 1956, as follows:

- (i) 15 B131 jet aircraft historically leased and subsequently purchased from HT Co.
- (ii) 12 B331 jet aircraft historically acquired which consisted of:
  - 4 B331 jet aircraft historically leased and subsequently purchased from HT Co.
  - 1 B331 jet aircraft historically purchased from HT Co.
  - 7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon; and
- (iii) 6 B331 jet aircraft historically delivered to another airline.

b. That TWA did not lease 5 B331B aircraft from Boeing in 1962 and 1963.

c. That TWA acquired directly from Convair and at the dates shown in Exhibit V all 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956.

The adjusted timing of reconstructed expenditures for deferred training costs for the CV880 fleet is as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

J. Reserve for overhaul of jet aircraft:

Net additions to the reserve for overhaul of jet aircraft are to be reconstructed as follows:

- a. The portions of the historical net additions resulting from provisions charged to training and other costs applicable to new aircraft are to be adjusted in the same manner as expenditures for deferred training costs as set forth in Assumption H above.
- b. The portions of the historical net additions resulting from net provisions charged to maintenance expense are to be adjusted in accordance with the proportionate increases in historical maintenance expense estimated by Coverdale & Colpitts (Appendix B hereto).

**K. Provisions for income taxes:**

**Derived from TWA's historical policy:** Calculations of provisions for current and deferred federal income taxes are to be made on basis consistent with the procedures historically followed by TWA in making tax computations during the respective periods.



## SECTION VI - APPLICATION OF ASSUMPTIONS

### Introduction:

This section describes the methods used in making adjustments to the historical financial data of TWA for the period September 30, 1955 - December 31, 1963 to give effect to the assumptions enumerated in Section V. In order to apply these assumptions it was necessary to make corollary assumptions as to events or transactions which it is reasonable to assume would have taken place; these corollary assumptions are described herein.

Where practicable, the accounting methods used in making the adjustments were consistent with the accounting methods historically followed by TWA in the related periods. In the relatively few instances where it was impracticable to use historical methods, because the required information was not available on a reconstructed basis, we used alternative methods which appeared reasonable in the circumstances and which we believe produced results not materially different from those that would have been produced through the use of historical methods.

In preparing the reconstructed financial statements, historical amounts which were assumed to be different on a reconstructed basis were excluded and replaced by reconstructed amounts. The adjustments to give effect to these changes were applied to the historical financial data on a calendar quarter by quarter basis.

Assumptions are discussed in this section in the same sequence which they are set forth in Section V. In each case, the assumption is repeated and is followed by explanations of the application thereof to the related schedules. Letter designations of the subsections herein correspond with those used in Section V. All amounts in this section are stated in millions of dollars.

A. 1955 equity financing:

The assumptions

1. On June 1, 1955, 3,336,546 shares of capital stock are to be sold at \$17.50 per share. Net proceeds after underwriting fees and expenses are assumed to be \$55.5 million.
2. The proceeds are to be used to:
  - a. Redeem \$35.0 million principal amount of 3-3/4% Equipment Mortgage Sinking Fund Bonds on July 1, 1955.
  - b. Reimburse Hughes Tool Company (HT Co.) on June 1, 1955 for \$16.8 million of deposits with Lockheed Aircraft Corporation (Lockheed) for twenty-five L1649A aircraft, plus interest on such amount for five months at 3% or \$.2 million.
  - c. Deposit \$2.4 million with Lockheed on September 29, 1955 pursuant to a contract for five L1049G aircraft.
3. As a consequence of the 1955 equity financing the effect of the sale in 1957 of 3,337,036 shares of capital stock at \$13.00 per share is to be eliminated from the historical financial statements. proceeds to TWA were \$43.2 million.

Application of the assumptions

Schedule A sets forth the adjustments applied to the historical statement of TWA's consolidated financial position as of September 30, 1955 to give effect to these assumptions. The adjustments are described below:

- (i) Net proceeds of \$55.5 million from the June 1, 1955 sale of capital stock were added to net current assets; an amount (\$16.7 million) equal to the aggregate par value of the shares sold was added to capital stock and the balance (\$38.8 million) was added to capital surplus.
- (ii) Both long-term debt and net current assets were reduced by an amount of \$35.0 million as a result of the assumed redemption on July 1, 1955 of the outstanding principal amount of 3-3/4% Equipment Mortgage Sinking Fund Bonds.

(iii) Additional adjustments to retained earnings as at September 30, 1955 assumed to result from the redemption given effect to in (ii) above, were as follows:

	Increase (decrease) in retained <u>earnings</u>
Redemption premium of 3-3/4%	(\$1.3)
Reversal of interest for months of July 1955 through September 1955, historically accrued at September 30, 1955 (interest on the issue was payable June 1 and December 1)	.3
Write-off of unamortized debt expense on the issue (less than \$.05 million)	-
<u>Less</u> - Estimated reduction in provision for federal income taxes at September 30, 1955 resulting from preceding adjustments	(1.0)
	.5
Net decrease in retained earnings	( <u>\$ .5</u> )
 (iv) Deposits with manufacturers were increased by \$17.0 million as a result of the assumed reimbursement to HT Co. on June 1, 1955 of \$16.8 million for deposits made by HT Co. with Lockheed for twenty-five L1649A aircraft, plus assumed interest on such amount for five months at 3%, or \$.2 million.	
 (v) Deposits with manufacturers were increased by \$2.4 million as a result of the assumed deposit of \$2.4 million with Lockheed on September 29, 1955 for five L1049G aircraft. A contract dated September 24, 1955 between HT Co. and Lockheed (subsequently assigned to TWA) for purchase of these aircraft called for such a deposit within five days of the execution of the contract. See subsection E herein for description of additional reconstructed transactions related to this contract.	

In addition to the foregoing adjustments made as of September 30, 1955, the effect of the equity financing carried out in 1957 has been excluded from the reconstructed financial statements. This adjustment consisted of reducing net current assets by the net proceeds of the financing (\$43.2 million) and reducing the capital stock and capital surplus accounts by amounts of \$16.7 million and \$26.5 million, respectively.

Reconstructed long-term debt: -1. Flight equipment mortgage:The assumptions

- a. TWA is to enter into a loan agreement dated October 1, 1955 relating to Series A flight equipment mortgage notes (minimum amount - \$50.0 million; maximum amount - \$170.0 million).
- b. TWA is to enter into a loan agreement dated July 1, 1959 relating to Series B flight equipment mortgage notes (minimum amount - \$100.0 million; maximum amount - \$110.0 million).
- c. Proceeds amounting to \$50.0 million each on October 1, 1955, October 1, 1956 and April 1, 1957 and \$20.0 million on January 1, 1958 from flight equipment mortgage notes, Series A, 4% are to be deposited in the flight equipment fund.
- d. Proceeds amounting to \$50.0 million on October 1, 1959 and \$10.0 million on April 1, 1960 from flight equipment mortgage notes, Series B, 6% are to be deposited in the flight equipment fund.
- e. Interest and commitment fees are to be calculated and paid in accordance with the terms of the flight equipment mortgage and the related mortgage notes.
- f. Total agency fee and estimated other expenses of issue are to be assumed as .183% of the maximum amount, or \$.3 million for Series A and \$.2 million for Series B.
- g. Moneys are to be drawn down from the flight equipment fund in accordance with the provisions of the 1955 flight equipment mortgage relating thereto.



Application of the assumptions

The terms of the flight equipment mortgage and the notes issued thereunder, estimated expenses of issue, and transactions in the flight equipment fund created under the terms of the mortgage have been given effect to in the reconstructed financial statements in accordance with information relating thereto as set forth in the report of Harrison Ripley (Appendix A hereto).

Gross proceeds of \$260.0 million from sales of the Series A and Series B notes were added to the reconstructed flight equipment fund (see below for description of other transactions in this fund). Schedules B and B-3 show these additions to long-term debt and the related additions to the flight equipment fund, respectively.

Consistent with TWA's historical accounting methods, reconstructed agency fee and estimated other expenses of issue on the Series A and Series B notes (\$.3 million and \$.2 million, respectively) were assumed to have been deferred and amortized, on a straight-line basis, over the 25-year period ending with maturity of the notes. Schedule B-2 summarizes such long-term debt expense.

Reconstructed commitment fees were calculated at an annual rate of 1/2% on the unused portion of the maximum principal amount of authorized debt for the periods from the dates of the agreements to the dates of expiration of the commitments. As shown on Schedule B-1, reconstructed commitment fees have been included in interest expense.

Reconstructed gross interest expense on the Series A and Series B notes was calculated at annual rates of 4% and 6%, respectively, on outstanding principal. Reconstructed interest expense, commitment fees and amortization of deferred long-term debt expense are summarized on Schedule B-1. As shown on this schedule, reconstructed gross interest expense was reduced by the amounts of interest assumed to have been capitalized on deposits with manufacturers; procedures used in calculating reconstructed capitalized interest are described in subsection



Transactions in the reconstructed flight equipment fund, summarized on Schedule B-3, are as follows:

Additions to flight equipment fund:

- a. Gross proceeds from flight equipment mortgage notes,
- b. Collections of receivables arising from sales of flight equipment (assumed to be the same as historical collections except for receivables attributable to piston aircraft assumed to have been sold at earlier dates and assumed increased retirements of jet engines and jet rotatable parts - see subsection G) and
- c. Proceeds of insurance claims on flight equipment (included on Schedule B-3 with collections of receivables).

Deductions from flight equipment fund:

Qualifying capital expenditures (expenditures for deposits with manufacturers, flight equipment, expendable parts and construction work in progress - flight equipment, but not including additions for capitalized interest). For any calendar quarter in which qualifying capital expenditures exceeded the balance of amounts in the fund, excess expenditures were "carried over" to the succeeding quarter to be then deducted from amounts in the fund, except that such excess expenditures that had been made prior to the first sale of Series B notes were not carried over to be deducted from the proceeds of the Series B notes. Reconstructed qualifying capital expenditures are summarized on Schedule B-4.

Under the terms of the assumed loan agreements relating to the Series A and Series B notes, no sinking fund payments or repayments of principal are required until after December 31, 1963.

To simplify the calculations, we have, with your concurrence, assumed that there is no interest income on amounts in the reconstructed flight equipment fund.

2. Subordinated debentures, 5%:

The assumptions

a. On June 1, 1959, the net proceeds of \$58.4 million from an issue of \$60.0 million of subordinated debentures are to be received and deposited in the general funds.

b. Interest is to be calculated and paid in accordance with the terms of the debentures.

c. Total underwriting expenses and other expense of issue are to be \$1.6 million.

d. Debentures are to be convertible into common stock at any time prior to June 1, 1969. There are to be no conversions through December 31, 1963.

### Application of the assumptions

The terms of this issue and related interest rate and issue expenses have been given effect to in the reconstructed financial statements in accordance with information relating thereto as set forth in the report of Harriman Ripley (Appendix A hereto).

The net proceeds (after deducting underwriting and other expense of issue) from this debt issue were added to net current assets. As with the flight equipment mortgage notes, issue expenses (in this case aggregating \$1.6 million) were deferred and amortized, on a straight-line basis, over the 25-year period ending with maturity of the debentures. Interest expense was calculated at an annual rate of 5% from June 1, 1959. The proceeds, gross interest expense and issue expense are shown on Schedules B, B-1 and B-2, respectively.

TRANS WORLD AIRLINES, INC.RECONSTRUCTED LONG-TERM DEBT EXPENSE - UNAMORTIZED PORTIONFOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

Years ended December 31,		Flight equipment mortgage notes			Subordinated debentures, 5%	Total Balance to Exhibit I-1, net change to Exhibit III-1
		Series A, 4%	Series B, 6%			
1955***	Deferral	\$ .3				\$ .3
	Amortization(a)	*				*
	Ending balance	.3				.3
1956	Amortization(a)	*				*
	Ending balance	.3				.3
1957	Amortization(a)	*				*
	Ending balance	.3				.3
1958	Amortization(a)	*				*
	Ending balance	.3				.3
1959	Deferrals		\$ .2		\$ 1.6	1.8
	Amortization(a)	(.1)	*		*	(.1)
	Ending balance	.2	.2		1.6	2.0
1960	Amortization(a)	*	*		(.1)	(.1)
	Ending balance	.2	.2		1.5	1.9
1961	Amortization(a)	*	*		(.1)	(.1)
	Ending balance	.2	.2		1.4	1.8
1962	Amortization(a)	*	*		*	*
	Ending balance	.2	.2		1.4	1.8
1963	Amortization(a)	*	*		(.1)	(.1)
	Ending balance	<u>\$ .2</u>	<u>\$ .2</u>		<u>\$ 1.3</u>	<u>\$ 1.7</u>

\*Amount is less than \$.05 million.

\*\*\*Three months ended December 31, 1955.

(a) Amortization to Schedule B-1

C. Elimination of historical debt financing:

The assumptions

1. The debt financing program, referred to in Assumption B above, is to be considered as a substitute for the entire amount of debt financing, both long-term and short-term, reflected in the historical financial statements, except for minor amounts relating to instalment contracts for purchase of bulk storage and other facilities which are to remain unchanged.

2. Amounts for interest, commitment fees and debt expense, if any, relating to the eliminated historical debt are to be excluded.

Application of the assumptions

Adjustments to give effect to these assumptions were made by

(1) determining the amounts included in the historical financial statements for the historical debt financing together with the related interest, commitment fees and debt expense and (2) excluding such amounts from the reconstructed financial statements. The items so excluded are:

- a. All long-term borrowings made between October 1, 1955 and December 31, 1963, except the minor amounts described in the assumptions;
- b. All repayments and transfers (to or from current liabilities) of long-term debt between October 1, 1955 and December 31, 1963, except the minor amounts described in the assumptions;
- c. All gross interest expense related to the excluded debt;
- d. All capitalized interest on deposits with manufacturers historically financed from proceeds of the eliminated debt issues and depreciation thereon;
- e. The portion of the 1963 special item pertaining to the write-off of the unamortized portion of capitalized interest.

Historical long-term debt (including historical changes therein), interest expense and issue expense for the period October 1, 1955 to December 31, 1963 are summarized on Schedules C and C-1 attached. Historical capitalized interest is referred to in subsection E. Historical additions to or deductions from funds restricted for flight equipment purchases have been excluded from the reconstructed financial statements.

D. Gain (loss) from operations before  
provisions for depreciation,  
obsolescence and amortization:

The assumption

Gain (loss) from operations before provisions for depreciation, obsolescence and amortization is to be reconstructed to give effect to changes estimated by Coverdale & Colpitts, consulting engineers, in their report which has been prepared for use in this proceeding (Appendix B hereto).

Application of the assumption

Schedule D-1 summarizes estimates made by Coverdale & Colpitts of increases in gain from operations before provisions for depreciation, obsolescence and amortization. As shown on Schedule D, the estimated increases, aggregating \$122.4 million, were added to historical amounts to determine reconstructed amounts.

A net amount of \$.7 million, representing a portion of historical bad debts related to sales of flight equipment with earlier sales dates, has been excluded from the determination of reconstructed gain from operations. In the reconstructed financial statements, all bad debts relating to flight equipment with earlier sales dates are included in other income credits (charges) - net (see explanation in subsection G):



TWA Ex. 7(b)(2), Schedule D  
(Price Waterhouse Study - Volume Two)

TRANS WORLD AIRLINES, INC.

GAIN FROM OPERATIONS BEFORE DEPRECIATION,  
OBsolescence AND AMORTIZATION

FOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

Add (deduct) -

Years ended December 31,	Increases estimated by Coverdale & Colpitts		Provision for bad debts (a)	<u>Reconstructed</u> <u>Exhibit II-1</u>
	<u>Historical</u> <u>Exhibit II-1</u>	<u>Schedule D-1</u>		
1955*** **	\$ 2.7			\$ 2.7
1956**	16.4			16.4
1957**	22.3			22.3
1958**	31.2			31.2
1959	51.4	\$ 17.0		68.4
1960	53.5	55.9		109.4
1961	46.1	23.4	\$ .8	70.3
1962	64.3	13.3	(.1)	77.5
1963	90.5	12.8		103.3
Total	<u>\$378.4</u>	<u>\$122.4</u>	<u>\$ .7</u>	<u>\$501.5</u>

\*\*Reconstructed and historical amounts are assumed to be identical.

\*\*\*Three months ended December 31, 1955.

(a)Represents portion of historical bad debts, relating to flight equipment with earlier sales dates, included in this caption.  
See page 84 for summary of historical uncollected receivables.

TRANS WORLD AIRLINES, INC.INCREASES IN GAIN FROM OPERATIONSESTIMATED BY COVERDALE & COLPITTSFOR THE PERIOD JANUARY 1, 1959 - DECEMBER 31, 1963

(Amounts in millions)

Years ended December 31.	<u>As reported by Coverdale &amp; Colpitts</u>						Increases in gain from operations before depreciation, obsolescence and amortization <u>Schedule D</u>
	<u>Increases in gain from operations</u>	<u>Chapter I</u>	<u>Chapter II</u>	<u>Chapter III</u>	<u>Chapter IV</u>	<u>Chapter V</u>	
		<u>Add (deduct) - increase (decrease) in depreciation, obsolescence and amortization included therein</u>					
1959	\$10.6	\$ 4.4		\$2.0			\$ 17.0
1960	33.8	8.5	\$ 3.8	1.7	\$5.4	\$ 2.7	55.9
1961	10.9	(1.0)	5.1	.1	2.6	5.7	23.4
1962	4.5	(.1)	4.3		(.8)	5.4	13.3
1963	4.2	(.3)	3.6	.3	.6	4.4	12.8
	<u>\$64.0</u>	<u>\$11.5</u>	<u>\$16.8</u>	<u>\$4.1</u>	<u>\$7.8</u>	<u>\$18.2</u>	<u>\$122.4</u>

E. Capital expenditures for property  
and equipment:C o n t e n t s

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Explanatory comments:

This section of our report deals with reconstruction of additions and transfers to the property and equipment accounts. Procedures used to reconstruct sales or retirements (as shown on Schedule due to earlier disposition of piston aircraft and other changes are described in subsection G.

In order to facilitate adjustments, capital expenditures flight equipment, as shown in this subsection and attached schedule have been classified into somewhat different categories than those historically used by TWA for accounting purposes. The historical categories and the categories adopted for purposes of this subsection are as follows:

F l i g h t   e q u i p m e n t

<u>Categories historically used by TWA</u>	<u>Categories for purposes of this subsection</u>
Airframes	Aircraft
Aircraft engines	Aircraft (for original engine Spare engines
Aircraft propellers	Aircraft (for originally installed equipment) Other flight equipment
Aircraft communications and navigational equipment	Aircraft (for originally installed equipment) Other flight equipment
Miscellaneous flight equipment	Aircraft (for originally installed equipment) Other flight equipment
Improvements to leased flight equipment	Aircraft
Flight equipment rotatable parts and assemblies	Rotatable parts
Flight equipment expendable parts	Expendable parts

Expendable parts:The assumption

E1. "Capital expenditures" are to include the investment in flight equipment expendable parts in accordance with the flight equipment mortgage described in the Harriman Ripley report (Appendix A hereto); accordingly, expendable parts are to be classified with property and equipment for the entire period.

Application of the assumption

Reconstruction of the amounts and timing of capital expenditures for expendable parts are discussed in the jet fleet subsections for periods in which such amounts differ from historical. Since it was impracticable to determine gross additions to expendable parts by jet fleet, net changes by fleet in the balances of expendable parts have been treated as the net amount of capital expenditures for expendable parts. Expendable parts are classified herein with property and equipment for the entire period. Historically, commencing January 1, 1957 expendable parts were classified as current assets.

Pursuant to an accounting policy change made historically by TWA at December 31, 1963 and reflected in the 1963 special item, working stocks of expendable parts previously expensed at time of issue to the maintenance shops were historically reinstated in the inventory accounts at that date, together with appropriate reserves for obsolescence. A similar adjustment was made, with your concurrence, on a reconstructed basis, which results in an increase of \$.7 million in the net amount credited to the 1963 special item.



Capitalized Interest:The assumption

E2. The reconstructed cost of jet flight equipment is to include capitalized interest on funds deposited with aircraft and engine manufacturers (to the extent such deposits are financed from borrowed funds) from date of deposit to date of delivery of aircraft and engines.

Application of the assumption

For purposes of calculation of reconstructed capitalized interest, the interest rate used with respect to each reconstructed deposit was the stated interest rate on the debt issue which was assumed to be the source of the funds. Consistent with TWA's historical method, this interest rate does not give effect to commitment fees or amortization of debt expense. No interest was capitalized in cases where payment of a deposit was made after an amount equivalent to the aggregate proceeds of the most recent long-term borrowing had been previously expended for deposits with manufacturers and property and equipment.

Reconstructed amounts of capitalized interest were added to property and equipment with corresponding decreases in the amounts of interest expense charged to income, as shown on Schedules E-1 and B-1, respectively. As of the reconstructed in-service date of each aircraft or delivery date of spare engines, the related amount of reconstructed capitalized interest was transferred to flight equipment (see Schedules E-1 and E-3). All historical additions to or transfers among property accounts relating to capitalized interest were excluded from the reconstructed financial statements.

The method used to calculate reconstructed capitalized interest for jet fleets is demonstrated for B131 aircraft and spare engine deposits on Schedules E-1a and E-1b, respectively.

A summary of reconstructed and historical amounts of capitalized interest for the period October 1, 1955 to December 31, 1963 follows:

<u>Fleet</u>	<u>Reconstructed</u>	<u>Historical</u>	<u>Increase (decrease) over historical</u>
B131	\$1.9		\$1.9
B331	3.3		3.3
CV880	3.9	\$ .3	3.6
B131B		1.6	(1.6)
B727		.3	(.3)
	<hr/>		
Total	<u>\$9.1</u>	<u>\$2.2</u>	<u>\$6.9</u>

The increases in the reconstructed amounts over the historical amounts for B131, B331 and CV880 aircraft result from the assumption that, on a reconstructed basis, TWA would have made deposits with manufacturers that historically were not made by TWA. Historical capitalized interest for B131B and B727 aircraft was excluded since reconstructed deposits for these aircraft would have been financed from general funds. (Reconstructed proceeds of borrowings would have been previously expended for other deposits and property and equipment.)

Pursuant to an accounting policy change made historically by TWA at December 31, 1963, the undepreciated portion of reconstructed capitalized interest was, with your concurrence, written off as a special charge as at that date.

Piston Aircraft:The assumption

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- a. That the piston aircraft which TWA historically acquired from or through HT Co. during 1956-1958 were instead acquired directly from Lockheed; no change in dates of delivery is assumed.

Application of the assumption

Twenty-five L1649A aircraft - Assumption A states that TWA would have reimbursed HT Co. on June 1, 1955 for deposits of \$16.8 million with Lockheed on these aircraft, plus interest of \$.2 million, considered as additional cost of the aircraft. We have assumed, on your advice, that in May 1956 TWA would have made an additional deposit of \$.4 million with Lockheed for purchase of these aircraft, this being the amount historically paid to Lockheed by HT Co. at that time. The historical reimbursement by TWA to HT Co. of \$17.2 million in 1956 for deposits on these aircraft has been excluded from the reconstructed financial statements. In addition, on a reconstructed basis, consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases would have been made by TWA directly from the manufacturer and not from HT Co., we have assumed, on your advice, that an amount of \$1.3 million described as "interest," historically paid by TWA to HT Co. in connection with acquisition of these aircraft and treated as additional cost of the aircraft, would not have been paid to Lockheed.

A reconciliation of reconstructed and historical capital expenditures for these aircraft and related spare engines is as follows:

Historical	\$69.5
<u>Deduct</u> - "Interest" historically paid to HT Co.	(1.3)
<u>Add</u> - Reconstructed interest assumed to be paid to HT Co. in June 1955	.2
Reconstructed	<u>\$68.4</u>

Eight L1049G aircraft - Consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases which were made by HT Co. would have been made by TWA directly from the manufacturer, we have assumed, on your advice: (i) that (as explained in subsection A above) on September 29, 1955 TWA would have made a deposit of \$2.4 million with Lockheed for five aircraft (a contract between HT Co. and Lockheed dated September 24, 1955 covering purchase of these five aircraft called for such a deposit to be made within five days of the execution of the contract); (ii) that on October 15, 1955, TWA would have made an additional deposit of \$1.5 million with Lockheed for three additional L1049G aircraft (an amendment to the above contract dated September 24, 1955, which granted an option to HT Co. to purchase three additional aircraft, required such a deposit by October 15, 1955 if the option were exercised); and (iii) that an amount of \$.1 million described as "interest," historically paid by TWA to HT Co. in connection with acquisition of these aircraft and treated as additional cost of the aircraft, would not have been paid to Lockheed.

A reconciliation of reconstructed and historical capital expenditures for these aircraft and related spare engines is as follows:

Historical	\$17.3
<u>Deduct</u> - "Interest" historically paid to HT Co.	<u>(.1)</u>
Reconstructed	<u>\$17.2</u>

Four L1049H aircraft - Consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases which were made by HT Co. would have been made by TWA directly from the manufacturer, we have assumed, on your advice, that TWA would have made a deposit of \$2.2 million with Lockheed in December 1957 as called for in a contract between HT Co. and Lockheed dated December 31, 1957 covering purchase of these aircraft. Historically, TWA made no deposits for these aircraft. No adjustments were made to historical cost of these aircraft since TWA historically made no "interest" payment thereon to HT Co.



B131 jet aircraft:The assumptions

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- b. That TWA acquired, directly from Boeing and on the earlier delivery dates set forth in the schedule of "Reconstructed and historical delivery and in-service dates - B131, B331, and CV880 jet aircraft" (Exhibit V) annexed hereto, each of the 33 Boeing aircraft which HT Co. ordered in 1956, as follows:

- (i) 15 B131 jet aircraft historically leased and subsequently purchased from HT Co.

- f. That TWA acquired directly from suppliers certain customer-furnished equipment and rotatable and expendable parts for jet aircraft which were originally acquired by HT Co. That such acquisitions were made on the dates that suppliers' invoices were transmitted by TWA to HT Co. for payment.

Application of the assumptions

Adjustments made to historical financial data to apply these assumptions are described in the succeeding paragraphs.

Deposits with manufacturers - We have assumed, on your advice, that TWA would have entered into a contract with Boeing in the fourth calendar quarter of 1955 for these fifteen aircraft and would have made deposits with Boeing in the same amounts and on the same relative time schedule as those called for in an agreement between Boeing and HT Co., dated March 2, 1956, and amendments thereto, which covered purchase of fifteen B131 jet aircraft; and that consequently the last deposit would have been made six months before the reconstructed delivery date of the first aircraft and preceding deposits would have been made at three-month intervals as specified in the HT Co. contract, except for the first deposit which would have been made in October 1955.

Also consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases which were made by HT Co. would have been made by TWA directly from the manufacturer, we have assumed, on your advice, that with respect to spare



engines at approximately the same time the aircraft were ordered TWA would have contracted with United Aircraft Corporation (Pratt & Whitney) for the same number of spare engines as historically acquired and that deposits would have been made of 5% of contract price at the time of order and an additional 15% nine months in advance of reconstructed delivery dates. These deposit terms are in accordance with the provisions of a purchase agreement between HT Co. and Pratt & Whitney, dated February 14, 1956, for JT3C-4 spare engines for B131 aircraft.

Reconstructed deposits were included in deposits with manufacturers. As of the reconstructed delivery dates of aircraft and spare engines, deposits were transferred pro rata to appropriate flight equipment categories. Historically, TWA made no deposits relating to this fleet.

Reconstructed deposits for B131 aircraft and spare engines are summarized as follows:

Year	Quarter	Deposits made for		Less- transfers to flight equipment on delivery of		Net additions (deductions)
		Aircraft	Spare engines	Aircraft	Spare engines	
1955	4	\$ 3.4	\$ .3			\$ 3.7
1956	1	1.4				1.4
	2	1.4				1.4
	3	2.0				2.0
	4	2.0				2.0
	Year total	6.8				6.8
1957	1	2.1				2.1
	2	2.1				2.1
	3	2.0				2.0
	4	2.0				2.0
	Year total	8.2				8.2
1958	1	2.0	.1			2.1
	2	2.0	.1			2.1
	3		.4			.4
	4		.2	\$ 3.0	\$ .2	(3.0)
	Year total	4.0	.8	3.0	.2	1.6
1959	1			4.5	.2	(4.7)
	2			11.9	.5	(12.4)
	3			3.0	.2	(3.2)
	4					
	Year total			19.4	.9	(20.3)
	Total	\$22.4	\$1.1	\$22.4	\$1.1	-

**Aircraft** - In accordance with the underlying assumptions followed herein, we have assumed, on your advice, that capital expenditures for these aircraft would have consisted of (1) the amounts appearing on Boeing invoices to HT Co. for these aircraft, (2) the amounts historically paid by TWA to HT Co. for customer-furnished equipment and "other costs" and (3) TWA's historical acquisition costs. Reconstructed and historical expenditures for aircraft are as follows (differences are explained immediately following the table):

	Recon- structured	Historical	Increase (decrease) over historical
Payments to Boeing	\$69.0	\$69.1	(\$ .1)(a)
Customer-furnished equipment	1.9	1.9	
"Other costs" charged TWA by HT Co.	.2	.2	
Amount paid to HT Co. and described as "interest"		2.0	(2.0)(b)
"Depreciation" allowed TWA by HT Co.		(11.3)	11.3 (c)
Acquisition costs	.5	.4	.1 (d)
Subsequent capitalized modifications	1.0	1.0	
	<u>\$72.6</u>	<u>\$63.3</u>	<u>\$ 9.3</u>

- (a) The "Summary of Hughes - TWA Final Accounting for Closing on December 30, 1960" shows an aggregate amount paid to manufacturer by HT Co. of \$69.1 million, whereas the Boeing invoices for these aircraft aggregate \$69.0 million. The difference (\$.1 million) between these two amounts has been excluded, since the nature of the items giving rise to the difference could not be identified.
- (b) The amount of \$2.0 million shown in the Hughes - TWA Final Accounting as "Interest at 5.5%" has been excluded, since on a reconstructed basis TWA would have purchased the aircraft directly from Boeing.
- (c) No reconstructed "depreciation" allowance is assumed, since the aircraft would have been purchased new directly from Boeing.
- (d) The difference of \$.1 million in acquisition costs represents the amount historically amortized during the period the aircraft were leased.

Reconstructed (R) expenditures for fifteen aircraft have been substituted for historical (H) expenditures in the following periods:

Year	Quarter	Number of aircraft		Capital expenditures	
		R	H**	R	H
1958	4	<u>2</u>		\$ 9.6	
1959	1	3		14.3	
	2	8		38.1	
	3	2		9.6	
	4				
	Year total	<u>13</u>		<u>62.0</u>	
1960	1			.7*	\$ .7*
	2		2	.2*	9.3*
	3				
	4				
	Year total	<u>13</u>			<u>53.2</u>
		<u>15</u>		<u>.9</u>	<u>63.2</u>
1961	1				
	2				
	3				
	4				
	Year total.			<u>.1*</u>	<u>.1*</u>
				<u>.1</u>	<u>.1</u>
	Total	<u>15</u>	<u>15</u>	<u>\$72.6</u>	<u>\$63.3</u>

\* Includes or represents subsequent capitalized modifications.

\*\* Historically, all 15 aircraft were leased prior to purchase.

Spare engines - Consistent with the assumption that these fifteen aircraft would have been delivered at earlier dates than they were historically leased, we have assumed (in conformity with advice from Coverdale & Colpitts) that spare engines would have been delivered earlier and that the reconstructed number and cost of spare engines would have been the same as historical. Calculations of resulting

earlier timing of capital expenditures were made based upon maintaining historical ratios of cost of engines on hand to number of aircraft on hand as follows:

Year	Quarter	<u>H i s t o r i c a l</u>			<u>R e c o n s t r u c t e d</u>			
		Number of leased aircraft on hand	Cumulative total cost of spare engines	"Spare engine investment" per aircraft	Number of aircraft on hand	"Spare engine investment" per aircraft	Cost of spare engines Cumulative total	Additions
1958	4				2	\$ .5	\$1.0	<u>\$1.0</u>
1959	1	3	\$1.5	\$.5	5	(3 at \$.5) (2 at \$.4)	2.2	1.2
	2	11	4.0	.4	13	.4	4.8	2.6
	3	15	5.9	.4	15	.4	5.9	1.1
	4							
Year total								<u>4.9</u>
Total								<u>\$5.9</u>

In the reconstructed financial statements, reconstructed expenditures for spare engines have been substituted for historical amounts.

Rotable and expendable parts, construction work in progress and other flight equipment - We have assumed, with your concurrence, that, except as explained in the following paragraph, there would have been no changes in timing of capital expenditures in these categories since a calculation of the average number of days' delay between reconstructed delivery dates of these aircraft and the dates at which the same number of aircraft were historically leased indicates an average delay for the fleet of approximately 24 days, or less than one-third of one calendar quarter.

With respect to certain rotatable and expendable parts and customer-furnished equipment originally acquired by HT Co. and subsequently resold to TWA, assumption E3f was applied by substituting expenditures on reconstructed dates for corresponding expenditures on historical dates.

The summaries below for the years in which reconstructed capital expenditures differ from historical show the effect of the assumption that TWA purchased directly from suppliers:

<u>Year</u>	<u>Quarter</u>	<u>Historical</u>	<u>Add - Invoices transmitted to HT Co.</u>	<u>Deduct - Reimburse- ments to HT Co.</u>	<u>Reconstructed</u>
<u>Rotable parts:</u>					
1958	4		\$ .9		\$ .9
1959	1	\$ .3	1.1	\$ .3	1.1
	2	1.6	2.7	1.6	2.7
	3	3.4		2.8	.6
	4	.4			.4
Year total		5.7	3.8	4.7	4.8
			\$4.7	\$4.7	
<u>Expendable parts:</u>					
1958	4		\$ .3		\$ .3
1959	1	\$ .1	.3		.4
	2	.2	.9	\$ .2	.9
	3	.4		1.3	(.9)
	4	.5			.5
Year total		1.2	1.2	1.5	.9
			\$1.5	\$1.5	
<u>Construction work in progress:</u>					
1958	1	\$ .1			\$ .1
	2	.1	\$ .1		.2
	3	.1	.1		.2
	4	.1	.5	.2	.4
Year total		.4	.7	.2	.9
1959	1	.1	.6	.4	.3
	2	.1	.4	1.0	(.5)
	3	.4	.2	.3	.3
	4	(.9)			(.9)
Year total		(.3)	1.2	1.7	(.8)
			\$1.9	\$1.9	



B331 jet aircraft:The assumptions

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

b. That TWA acquired, directly from Boeing and on the earlier delivery dates set forth in the schedule of "Reconstructed and historical delivery and in-service dates - B131, B331, and CV880 jet aircraft" (Exhibit V) annexed hereto, each of the 33 Boeing aircraft which HT Co. ordered in 1956, as follows:

(ii) 12 B331 jet aircraft historically acquired which consisted of:

4 B331 jet aircraft historically leased and subsequently purchased from HT Co.

1 B331 jet aircraft historically purchased from HT Co.

7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon; and

(iii) 6 B331 jet aircraft historically delivered to another airline.

f. That TWA acquired directly from suppliers certain customer-furnished equipment and rotatable and expendable parts for jet aircraft which were originally acquired by HT Co. That such acquisitions were made on the dates that suppliers' invoices were transmitted by TWA to HT Co. for payment.

Application of the assumptions

Adjustments made to historical financial data to apply these assumptions are described in the succeeding paragraphs.

**General** - The net increase of \$43.1 million, from historical of \$86.2 million to reconstructed of \$129.3 million, in capital expenditures for the B331 fleet is accounted for as follows:

	<u>Twelve aircraft</u>		<u>Six aircraft</u>	
	Direct purchase new from <u>Boeing</u>	<u>Earlier delivery</u>	Purchase of additional <u>aircraft</u>	<u>Total</u>
Aircraft	(\$ .7)		\$33.9	\$33.2
Spare engines			4.0	4.0
Rotable parts			3.3	3.3
Other flight equipment	—		.1	.1
	(.7)		41.3	40.6
Expendable parts		\$ .7	1.8	2.5
Net increase	(\$ .7)	\$ .7	\$43.1	\$43.1

**Deposits with manufacturers** - In conformity with the underlying assumptions we have assumed, on your advice, that TWA would have entered into a contract with Boeing in the fourth calendar quarter of 1955 for these eighteen aircraft and consequently would have made deposits with Boeing at dates one quarter earlier than and in the same amounts as those called for in an agreement, dated March 19, 1956, between Boeing and HT Co. which covered purchase of eighteen B331 jet aircraft.

With respect to spare engines, we have assumed (in conformity with advice from Coverdale & Colpitts) that, at approximately the same time the aircraft were ordered, TWA would have contracted with Pratt & Whitney for 50% more spare engines than were historically acquired. We have consequently assumed, on your advice and in conformity with the underlying assumption that TWA made purchases directly from the manufacturers of aircraft and equipment, that deposits would have been made of 5% of reconstructed capital expenditures at the time of order and an additional 15% nine months in advance of reconstructed delivery dates; these deposit terms are in accordance with the provisions of a purchase agreement, dated February 14, 1956, between HT Co. and Pratt & Whitney for JT4A-3 spare engines for B331 aircraft.

Reconstructed deposits were included in deposits with manufacturers. As of the reconstructed delivery dates of aircraft and spare engines, deposits were transferred pro rata to appropriate flight equipment categories. Historically, TWA made no deposits relating to this fleet.

Reconstructed deposits for B331 aircraft and spare engines are summarized as follows:

Year	Quarter	Deposits made for		Less - transfers to flight equipment on delivery of		Net additions (deductions)
		Aircraft	Spare engines	Aircraft	Spare engines	
1955	4	\$ 4.8	\$ .5			\$ 5.3
1956	1					
	2	1.9				1.9
	3	1.9				1.9
	4	2.9				2.9
	Year total	6.7				6.7
1957	1	2.9				2.9
	2	2.9				2.9
	3	2.9				2.9
	4	2.9				2.9
	Year total	11.6				11.6
1958	1	2.9				2.9
	2	2.9				2.9
	3	2.9				2.9
	4		.5			.5
	Year total	8.7	.5			9.2
1959	1		.5			.5
	2		.2			.2
	3		.4	\$ 7.1	\$ .6	(7.3)
	4		.1	10.6	.7	(11.2)
	Year total		1.2	17.7	1.3	(17.8)
1960	1			5.3	.3	(5.6)
	2			7.0	.5	(7.5)
	3			1.8	.1	(1.9)
	4					
	Year total			14.1	.9	(15.0)
	Total	\$31.8	\$2.2	\$31.8	\$2.2	-

Aircraft - In conformity with the underlying assumptions followed herein, we have assumed, on your advice, that reconstructed capital expenditures for the twelve aircraft would have consisted of (1) the amounts appearing on Boeing invoices to HT Co. for these aircraft, (2)

the amounts historically paid by TWA to HT Co. for customer-furnished equipment and "other costs" and (3) TWA's historical acquisition costs. We have further assumed, on your advice, that reconstructed capital expenditures for each of the additional six aircraft would have been equal to the average reconstructed capital expenditures for the twelve aircraft, all such aircraft being B331's. Reconstructed and historical expenditures for aircraft are as follows (differences are explained immediately following the table):

	Recon- structured	Total	Historical Payments to HT Co.	Others	Increase (decrease) over historical
Payments to Boeing	\$ 97.1	\$65.0	\$36.3	\$28.7	(\$ .3)(a))
Customer-furnished equipment	3.0	2.0	1.3	.7	32.4 (b))
"Other costs" charged TWA by HT Co.	.3	.2	.2		1.0 (b)
Amount paid to HT Co. and described as "interest"		2.8	2.8		.1 (b)
"Depreciation" allowed TWA by HT Co.		(2.4)	(2.4)		(2.8)(c)
Acquisition costs	.6	.4		.4	2.4 (d)
Subsequent capitalized modifications	.9	.7		.7	.2 (b)
	<u>\$101.9</u>	<u>\$68.7</u>	<u>\$38.2</u>	<u>\$30.5</u>	<u>\$33.2</u>

- (a) The "Summary of Hughes - TWA Final Accounting for Closing on December 30, 1960" shows an aggregate amount paid to manufacturer by HT Co. of \$36.3 million, whereas the total of Boeing invoices for five aircraft and the total net advances to Boeing made by HT Co. as shown on Boeing invoices for seven aircraft aggregate \$36.0 million. The difference (\$.3 million) between these two amounts has been excluded since the nature of the items giving rise to the difference could not be identified.
- (b) Historical expenditures were increased by 50% to reflect the assumed increase from twelve to eighteen aircraft.
- (c) The amount of \$2.8 million shown in the Hughes - TWA Final Accounting as "Interest at 5.5%" has been excluded since on a reconstructed basis TWA would have purchased the aircraft directly from Boeing.
- (d) No reconstructed "depreciation" allowance is assumed, since these aircraft would have been purchased new directly from Boeing.

Reconstructed (R) expenditures for eighteen aircraft have been substituted for historical (H) expenditures for twelve aircraft in the following periods:

Year	Quarter	Number of aircraft		Capital expenditures	
		R	H**	R	H
1959	3	4		\$ 22.4	
	4	6		33.6	
	Year total	10		56.0	
1960	1	3		16.8	
	2	4	6	22.4	\$35.3
	3	1	2	5.8	11.8
	4		4	.5 *	21.0 *
	Year total	8	12	45.5	68.1
1961	1			.6 *	.3 *
	2				.4 *
	3			(.3)*	
	4			.1 *	(.2)*
	Year total			.4	.5
1962	1				.1 *
Total		18	12	\$101.9	\$68.7

\* Includes or represents subsequent capitalized modifications.

\*\* Dates of purchase; four aircraft were leased in earlier periods.

Spare engines - Consistent with the assumption that the original twelve aircraft would have been delivered at earlier dates, we have assumed (in conformity with advice from Coverdale & Colpitts) that spare engines would have been delivered earlier. We have further assumed (in conformity with advice from Coverdale & Colpitts) that reconstructed expenditures for spare engines and subsequent capitalizations thereto are 150% of historical amounts. Calculations of



resulting amounts and earlier timing of capital expenditures were made based upon maintaining historical ratios of cost of engines on hand to number of aircraft on hand as follows:

Year	Quarter	<u>H i s t o r i c a l</u>			<u>R e c o n s t r u c t e d</u>			
		Number of owned or leased aircraft on hand	Cumulative total cost of spare engines	"Spare engine investment" per aircraft	Number of aircraft on hand	"Spare engine investment" per aircraft	Cumulative total cost of spare engines	Additions
1959	3							
	4	4	\$3.0	\$.7	4	\$.7	\$ 3.0	\$ 3.0
Year total					10	.7	6.7	3.7
								6.7
1960	1	5	4.3	.8	13	.6	8.2	1.5
	2	10	6.7	.7	17	.6	10.7	2.5
	3	12	7.5	.6	18	.6	11.6	.9*
	4	12	7.7*	.6				
Year total								4.9
1962	2							
	3		7.9*				11.8	.2*
	4		8.1*				12.1	.3*
Year total								.5
Total								\$12.1

\* Includes or represents capitalized modifications.

In the reconstructed financial statements, reconstructed expenditures for spare engines and subsequent capitalized modifications have been substituted for historical amounts.

Rotable and expendable parts, construction work in progress and other flight equipment - We have assumed (in conformity with advice from Coverdale & Colpitts) that reconstructed capital expenditures in these categories would have been 50% greater than historical and would have been made one calendar quarter earlier; a calculation of the average number of days delay between reconstructed delivery dates of the original twelve aircraft and the dates at which the same aircraft were historically leased or purchased indicates an average delay for these aircraft of approximately 127 days.

With respect to certain rotatable and expendable parts and customer-furnished equipment originally acquired by HT Co. and subsequently resold to TWA, Assumption E3f was applied by substituting expenditures on reconstructed dates for corresponding expenditures on historical dates.

The summaries below show the effect of the assumption that TWA purchased directly from suppliers:

<u>Year</u>	<u>Quarter</u>	<u>Historical</u>	<u>Add - Invoices transmitted to HT Co.</u>	<u>Deduct - Reimburse- ments to HT Co.</u>	<u>Adjusted historical</u>
<b><u>Rotable parts:</u></b>					
1959	3		\$ .3		\$ .3
	4		<u>.6</u>		<u>.6</u>
	Year total		<u>.9</u>		<u>.9</u>
1960	1				
	2	\$3.5		\$ .9	2.6
	3	.9			.9
	4	<u>.5</u>			<u>.5</u>
	Year total	<u>4.9</u>		<u>.9</u>	<u>4.0</u>
			<u>\$ .9</u>	<u>\$ .9</u>	
<b><u>Expendable parts:</u></b>					
1959	4		\$ .3		.3
1960	1	.6			.6
	2	1.0		\$ .3	.7
	3	.2			.2
	4	<u>.5</u>			<u>.5</u>
	Year total	<u>2.3</u>		<u>.3</u>	<u>2.0</u>
			<u>\$ .3</u>	<u>\$ .3</u>	
<b><u>Construction work in progress:</u></b>					
1959	1		\$ .1		.1
	2		.2		.2
	3	.2	.3		.5
	4	<u>.1</u>	<u>.6</u>		<u>.7</u>
	Year total	<u>.3</u>	<u>1.2</u>		<u>1.5</u>
1960	1	.1	.2		.3
	2	.1	(.1)	\$ .7	(.7)
	3	.3		.2	.1
	4	<u>(.2)</u>		<u>.4</u>	<u>(.6)</u>
	Year total	<u>.3</u>	<u>.1</u>	<u>1.3</u>	<u>(.9)</u>
			<u>\$1.3</u>	<u>\$1.3</u>	

The summaries below show the effects of the assumptions that TWA's reconstructed (R) capital expenditures in these categories would have been 50% greater than adjusted historical (AH), from the preceding table, and would have been made one quarter earlier:

Year	Quarter	Rotable parts		Expendable parts		Construction work in progress		Other flight equipment	
		R	AH	R	AH	R	AH	R	H
1958	4					\$ .1			
1959	1					.3	\$ .1		
	2	\$ .4				.8	.2		
	3	.9	\$ .3	\$ .4		1.0	.5		
	4	.1	.6	1.0	\$ .3	.5	.7		
	Year total	1.4	.9	1.4	.3	2.6	1.5		
1960	1	3.9		1.1	.6	(1.0)	.3	\$ .3	
	2	1.2	2.6	.3	.7	.2	(.7)	.1	\$ .2
	3	.7	.9	.7	.2	(.9)	.1	.1	
	4	1.1	.5	.9	.5	(.9)	(.6)	(.4)	.1
	Year total	6.9	4.0	3.0	2.0	(2.6)	(.9)	.1	.3
1961*	1	.7	.7	(.5)	.6	(.1)	(.6)		(.3)
	2	.1	.5	(.4)	(.3)	.1	(.1)		
	3	.4		.4	(.3)		.1		
	4		.3	(.3)	.3	(.1)			
	Year total	1.2	1.5	(.8)	.3	(.1)	(.6)		(.3)
1962	1	.5		.2	(.2)	.1			
	2	.1	.4	.3	.1	.1	.1		
	3	.1		.4	.2				
	4	.1		.2	.3	(.1)			
	Year total	.8	.4	1.1	.4	.1	.1		
1963	1		.1	.3	.2		(.1)		
	2	(.3)		(.3)	.2				
	3		(.2)	(.7)	(.2)	(.1)			
	4			1.2*	(.5)				
	Year total	(.3)	(.1)	.5	(.3)	(.1)	(.1)		
Total		\$10.0	\$6.7	\$5.2	\$2.7	-	-	\$ .1	-

\* Amount is 150% of historical capital expenditures made in the first calendar quarter of 1964.

B331B jet aircraft:The assumption

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- c. That, since TWA would have acquired the 6 B331 jet aircraft ordered by HT Co. but historically delivered to another airline, TWA did not enter into a contract with Boeing dated April 30, 1961 to purchase 6 B331B jet aircraft, did not modify that contract by letter agreement dated December 1, 1961 to provide for the leasing of 5 B331B jet aircraft from Boeing and did not lease 5 B331B aircraft from Boeing in 1962 and 1963. In addition, that TWA did not lease and subsequently purchase the related complement of 20 engines for such 5 B331B aircraft and did not incur any other capital expenditures relating to these aircraft.

Application of the assumption

In applying this assumption, historical capital expenditures for B331B aircraft have been excluded from the reconstructed financial statements. Such expenditures consisted of \$9.8 million for deposits with manufacturers, \$7.1 million for flight equipment and \$.9 million for expendable parts. Lease deposits for five B331B aircraft historically made in 1962 amounting to \$.3 million have been excluded from reconstructed "Investments and long-term prepayments."



CV880 jet aircraft:The assumptions

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- d. That TWA acquired directly from Convair and at the dates shown in Exhibit V all 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956 (20 of which were historically acquired by TWA in 1960 and 1961 and 6 of which were historically acquired in a used condition by TWA in 1963).

The adjusted timing of reconstructed expenditures for rotatable parts for the CV880 fleet is as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

Application of the assumptions

Adjustments made to historical financial data to apply these assumptions are described in the succeeding paragraphs.

General - The net increase of \$28.2 million, from historical of \$115.4 million to reconstructed of \$143.6 million, in capital expenditures for the CV880 fleet is accounted for as follows:

	<u>Twenty aircraft</u>		<u>Ten aircraft</u>	<u>Six aircraft</u>	<u>Total</u>
	<u>Direct purchase from Convair</u>	<u>Earlier delivery</u>	<u>Purchase of additional aircraft</u>	<u>Not purchased</u>	
Aircraft	(\$4.1)		\$39.2	(\$16.2)	\$18.9
Spare engines			2.8		2.8
Rotatable parts			4.4	(.1)	4.3
Other flight equipment			.2		.2
Expendable parts	(4.1)		46.6	(16.3)	26.2
Construction work in progress		\$ .5	1.4		1.9
			.1		.1
	<u>(\$4.1)</u>	<u>\$ .5</u>	<u>\$48.1</u>	<u>(\$16.3)</u>	<u>\$28.2</u>

Deposits with manufacturers - Consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases which were made by HT Co. would have been made by



TWA directly from the manufacturer, we have assumed, on your advice, that TWA would have entered into a contract with Convair in the third calendar quarter of 1956 for these thirty aircraft and would have made a deposit of \$26.3 million with Convair at that time (an agreement dated September 20, 1956, between HT Co. and Convair for purchase of thirty CV880 aircraft having required such a deposit); and that TWA would have made no deposits for spare engines (an agreement dated October 1, 1956 between General Electric Company (GE) and HT Co., which covered purchase of fifty-eight CJ805-1 spare engines, having required no deposit).

Historically, in December 1960 TWA reimbursed HT Co. for deposits on this fleet of \$17.5 million, plus "interest at 5.5%" of \$4.1 million, and "other costs" of \$.3 million. The aggregate reimbursement of \$21.9 million was historically classified as a deposit with manufacturer.

In the reconstructed financial statements, reconstructed (R) deposits for aircraft have been substituted for historical (H), as follows:

Year	Quarter	<u>Deposits</u>		<u>Less - Transfers to flight equipment on delivery</u>		<u>Net additions (deductions)</u>	
		R	H	R	H	R	H
1956	3	<u>\$26.3</u>				<u>\$26.3</u>	
1959	4			<u>\$ 1.7</u>		<u>(1.7)</u>	
1960	1			4.4		(4.4)	
	2			8.8		(8.8)	
	3			11.4		(11.4)	
	4						
			<u>\$21.9</u>		<u>\$ 1.0</u>		<u>\$20.9</u>
	Year total		<u>21.9</u>	<u>24.6</u>	<u>1.0</u>	<u>(24.6)</u>	<u>20.9</u>
1961	1				12.1		(12.1)
	2				4.4		(4.4)
	3				3.5		(3.5)
	4				.9		(.9)
	Year total				<u>20.9</u>		<u>(20.9)</u>
	Total	<u>\$26.3</u>	<u>\$21.9</u>	<u>\$26.3</u>	<u>\$21.9</u>	-	-

**Aircraft** - We have assumed, on your advice, that reconstructed capital expenditures for twenty aircraft would have consisted of the historical capital expenditures for these aircraft less the amount paid to

HT Co. and described as "interest;" and that reconstructed capital expenditures for each of the additional ten aircraft would have been equal to the average reconstructed capital expenditures for the twenty aircraft, all such aircraft being CV880's. Reconstructed and historical capital expenditures for these aircraft are as follows (differences are explained immediately following the table):

	<u>Reconstructed</u>	<u>Total</u>	<u>Historical</u> <u>Payments to</u>		<u>Increase (decrease) over historical</u>
			<u>HT Co.</u>	<u>Others</u>	
Payments to Convair	\$115.2	\$76.8	\$17.5	\$59.3	\$38.4 (a)
Credit from Convair for nonrecurring engineering charges	(.1)	(.1)		(.1)	
"Other costs" charged TWA by HT Co.	.5	.3	.3		.2 (a)
Amount paid to HT Co. and described as "interest"		4.1	4.1		(4.1) (b)
Acquisition costs	1.1	.6		.6	.5 (a)
Subsequent capitalized modifications	.3	.2		.2	.1 (a)
	<u>\$117.0</u>	<u>\$81.9</u>	<u>\$21.9</u>	<u>\$60.0</u>	<u>\$35.1</u>

- (a) Historical expenditures were increased by 50% to reflect the assumed increase from twenty to thirty aircraft.
- (b) The amount of \$4.1 million shown in the Hughes - TWA Final Accounting as "Interest at 5.5%" has been excluded, since on a reconstructed basis TWA would have purchased the aircraft directly from Convair.

The amount of \$59.3 million shown above as historical payment to Convair is after reduction for rebates of \$6.4 million allowed by Convair (related to number of aircraft sold). Reconstructed rebates of \$9.6 million (150% of \$6.4 million) have been deducted on a pro rata basis per aircraft in arriving at the reconstructed payments to Convair of \$115.2 million. We have assumed, with your concurrence, that the amount of reconstructed rebate per aircraft allowed on the respective reconstructed delivery dates would be the same as the rebate actually allowed by Convair on one aircraft historically delivered to TWA in May 1960, approximately the middle of the reconstructed delivery schedule; and that the remaining reconstructed rebates would have been received in July 1963, the time of the historical final settlement between Convair and TWA.

Reconstructed (R) expenditures for thirty aircraft have been substituted for historical (H) expenditures for twenty aircraft in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>Number of aircraft</u>		<u>Capital expenditures</u>	
		<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>
1959	4	<u>2</u>		<u>\$ 7.8</u>	
1960	1	5		19.6	
	2	10	1	39.2	\$ 4.0
	3	13		51.0	
	4			.2*	
Year total		<u>28</u>	<u>1</u>	<u>110.0</u>	<u>4.0</u>
1961	1	11		.1*	45.3
	2	4			16.9
	3	3			12.6*
	4	<u>1</u>			<u>8.2*</u>
Year total		<u>19</u>		<u>.1</u>	<u>83.0</u>
1963	1				(3.9)
	3			<u>(.9)</u>	<u>(1.2)</u>
Year total				<u>(.9)</u>	<u>(5.1)</u>
Total		<u>30</u>	<u>20</u>	<u>\$117.0</u>	<u>\$81.9</u>

\*Includes or represents subsequent capitalized modifications.

Historical capital expenditures for six used aircraft acquired in 1963 have been excluded.

Spare engines - Consistent with the underlying assumption which we have been instructed to follow that aircraft and equipment purchases which were made by HT Co. would have been made by TWA directly from the manufacturer, we have assumed, on your advice, that spare engines would have been acquired from GE in quantities and at delivery dates specified in a contract between GE and HT Co. dated

October 1, 1956. This contract originally covered fifty-eight spare engines, which we understand was the contemplated provisioning for thirty aircraft; however, historically only thirty-eight spare engines were acquired by TWA. To simplify the calculations, we have further assumed, with your concurrence, that reconstructed cost per engine is the same as the average historical cost per engine.

A summary of reconstructed (R) and historical (H) capital expenditures for spare engines is as follows:

<u>Year</u>	<u>Quarter</u>	<u>Number of engines</u>		<u>Capital expenditures</u>	
		<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>
1959	3	2		\$ .3	
	4	<u>16</u>		<u>2.3</u>	
	Year total	<u>18</u>		<u>2.6</u>	
1960	1	18		2.6	
	2	18	11	2.6	\$1.6
	3	4	10	.5	1.5
	4		<u>17</u>		<u>2.4</u>
	Year total	<u>40</u>	<u>38</u>	<u>5.7</u>	<u>5.5</u>
Total		<u>58</u>	<u>38</u>	<u>\$8.3</u>	<u>\$5.5</u>

In the reconstructed financial statements, reconstructed expenditures for spare engines have been substituted for historical amounts.

Rotable parts - We have assumed (in conformity with advice from Coverdale & Colpitts) that reconstructed capital expenditures for rotatable parts would have been 50% greater than historical; the timing of reconstructed expenditures is as set forth in Appendix C



hereto, which was prepared by Coverdale & Colpitts for use in this proceeding. In the reconstructed financial statements, reconstructed (R) expenditures have been substituted for historical (H), as follows:

Year	Quarter	R	H
1959	3	\$ 1.0	
	4	<u>1.6</u>	
	Year total	<u>2.6</u>	
1960	1	1.3	
	2	2.6	\$3.0
	3	2.2	1.7
	4	<u>1.1</u>	<u>.4</u>
	Year total	<u>7.2</u>	<u>5.1</u>
1961	1	.9	2.5
	2	.9	.2
	3	.2	.1
	4	<u>.5</u>	<u>.4</u>
	Year total	<u>2.5</u>	<u>3.2</u>
1962	1	.1	.1
	2	.5	.1
	3		.1
	4		
	Year total	<u>.6</u>	<u>.3</u>
1963	1		(.1)
	2		(.1)
	3	.1	.2
	4		
	Year total	<u>.1</u>	<u>-</u>
Total		<u>\$13.0</u>	<u>\$8.6</u>

The historical capital expenditures relating to six used aircraft acquired in 1963 have been excluded.

Expendable parts, construction work in progress and other flight equipment - We have assumed (in conformity with advice from Coverdale & Colpitts) that reconstructed capital expenditures in these categories would have been 50% greater than historical expenditures and would have been incurred three calendar quarters earlier; a calculation of the average number of days delay between reconstructed



and historical delivery dates of the original twenty aircraft shows an average delay of 299 days. In the reconstructed financial statements, reconstructed (R) expenditures have been substituted for historical (H) as follows:

Year	Quarter	Other flight equipment		Expendable parts		Construction work in progress	
		R	H	R	H	R	H
1957	4					\$ .1	
1958	1					.1	
	2					.1	
	3					.1	
	4					.1	\$ .1
	Year total					.4	.1
1959	1					.1	
	2					.1	
	3	\$ .5		\$1.0		.1	
	4	.2		.5		.7	.1
	Year total	.7		1.5		.7	.2
1960	1	.5		.3		.1	
	2	(.7)	\$ .3	.7	\$ .7	(.7)	.5
	3		.2	.2	.4	.3	(.1)
	4	.1	.4	(.6)	.2	(.2)	.1
	Year total	(.1)	.9	.6	1.3	(.5)	.5
1961	1		(.5)	(.1)	.5	(.7)	(.5)
	2			.2	.1		.2
	3	.1	.1	.4	(.4)		(.1)
	4			.3	(.1)	.2	(.5)
	Year total	.1	(.4)	.8	.1	(.5)	(.9)
1962	1			.6	.1	(.1)	
	2			.1	.3		(.1)
	3			(.1)	.2		.2
	4			.2	.4		(.1)
	Year total			.8	1.0	(.1)	-
1963	1				.1		
	2			.2*	(.1)		
	3			.2*	.2		.1
	4			.4*			
	Year total			.8	.2		.1
	Total	\$ .7	\$ .5	\$4.5	\$2.6	\$ .1	-

\*Amounts are 150% of historical capital expenditures made in the first three calendar quarters of 1964, respectively.

Ground property and equipment:

The assumption

E3. The amount and timing of capital expenditures for property and equipment (including, where applicable, expenditures for aircraft, spare engines, rotatable and expendable parts, other flight equipment and ground equipment) are to be adjusted to give effect to the following assumptions:

- e. That expenditures for certain ground property and equipment relating to or resulting from the changes in TWA's jet fleet described above were reconstructed as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

Application of the assumption

The adjustment by calendar quarters as supplied to us by Coverdale & Colpitts were added to historical capital expenditures in the respective calendar quarters to determine reconstructed capital expenditures. As shown on Schedule E-6, the adjustments resulted in an aggregate increase in capital expenditures of \$1.9 million.

Nonoperating property and equipment:

On a reconstructed basis an amount of \$.5 million, historically included in capital expenditures for nonoperating property and equipment in 1960 and resulting from value assigned to the 5 M202 aircraft received as trade-ins, has been considered to be proceeds from sales of flight equipment and accordingly is included in reconstructed funds restricted for flight equipment purchases. See subsection G.

Provisions for depreciation  
and obsolescence:

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Explanatory comments:

This section of our report deals with reconstruction of provisions for depreciation and obsolescence of property and equipment resulting from changes in capital expenditures and earlier in-service dates for jet aircraft. Changes in provisions for depreciation resulting from reconstructed sales or retirements of property and equipment are described in subsection G.

Schedule F-5 sets forth definitions of various terms used in this section of our report; such terms are set off in quotation marks the first time each is used in this section.

Depreciation policies:The assumption

F1. The TWA accounting policies relating to methods of depreciation, service lives and residual values of depreciable assets are to be the same as those followed historically during the period.

Application of the assumption

For jet flight equipment, historical depreciation policies are described in the B131 subsection herein and the service lives used for the B131, B331 and CV880 jet fleets are summarized on Schedule F-



Piston aircraft:

The assumption

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures relating to:

- a. Piston aircraft assumed to have been acquired during 1956-1958 directly from Lockheed.

Application of the assumption

Reconstructed capital expenditures for twenty-five L1649A aircraft and eight L1049G aircraft are assumed to be \$1.1 million and \$.1 million, respectively, less than historical capital expenditures (see subsection E). Reconstructed provisions for depreciation were calculated for these aircraft by reducing historical provisions for depreciation of the airframes to reflect the ratio of reconstructed cost to historical cost.

A reconciliation of reconstructed (R) and historical (H) provisions for depreciation due to lower cost, described above, and assumed earlier retirement of 103 aircraft, described in subsection G, is as follows:

Year	H	Decrease resulting from assumed*		R
		Reduction in cost of L1649A and L1049G aircraft	Earlier retirements of 103 aircraft**	
1955 (4th quarter)	\$ 1.5			\$ 1.5
1956	18.2			18.2
1957	23.7	\$.1		23.6
1958	26.9	.1		26.8
1959	26.6	.2	\$ .3	26.1
1960	20.7	.1	1.8	18.8
1961	19.8	.1	1.6	18.1
1962	14.9	.1		14.8
1963	6.0	.1		5.9
	<u>\$158.3</u>	<u>\$.8</u>	<u>\$3.7</u>	<u>\$153.8</u>

\*In addition to these decreases in provisions for depreciation of piston aircraft, the amount of the revision of service lives and residual values of piston aircraft and related equipment included in the 1961 special item was reduced by \$.2 million, resulting from the assumed reduction in cost of L1649A and L1049G aircraft, and by \$.6 million, resulting from the assumed earlier retirements of 103 aircraft.

\*\*These decreases in provisions for depreciation expense resulted in corresponding increases in net book value of aircraft retired.

B131 jet aircraft:The assumptions

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures and in-service dates relating to:

- b. 15 B131 jet aircraft historically leased and subsequently purchased from HT Co. which are assumed to be acquired by TWA directly from Boeing.

Application of the assumptions

General - Adjustments made to historical financial data to apply the assumptions are described in the succeeding paragraphs. The adjustments resulted in an increase of \$11.3 million (from historical \$28.5 million to reconstructed of \$39.8 million) in the provisions for depreciation of flight equipment. There was no change in the provision for obsolescence of expendable parts. This increase is summarized as follows:

	<u>Provisions for</u>		
	<u>Depreciation of flight equipment</u>	<u>Obsolescence of expendable parts</u>	<u>Total</u>
Historical provisions	\$28.5	\$.7	\$29.2
Additional provisions relating to:			
Direct purchase from Boeing, including \$.7 million depreciation of capitalized interest	10.5		11.2
Earlier in-service dates which averaged 24 days per aircraft, including \$.1 million depreciation of capitalized interest	.8		.8
Reconstructed provisions	<u>\$39.8</u>	<u>\$.7</u>	<u>\$40.5</u>

Depreciation of airframes - In order to facilitate adjustments, capital expenditures for flight equipment, as shown in subsection E and attached schedules, have been classified into somewhat different categories than those historically used by TWA for accounting purposes. The categories included in the aircraft caption are shown in subsection E. For purposes of calculating reconstructed provisions for depreciation, TWA's historical categories were used.

Reconstructed airframe costs for the 15 aircraft are summarized as follows:

Capital expenditures for aircraft (including \$1.0 million of subsequent capitalized modifications)	\$72.6
<u>Deduct:</u>	
"Original engines," depreciated separately as engines	\$8.8
"Installed equipment," depreciated separately as other flight equipment	<u>1.1</u>
	9.9
	62.7
<u>Add - Capitalized interest</u>	<u>1.9</u>
Airframe costs	<u>\$64.6</u>

Based upon historical depreciation policies, the reconstructed cost of each airframe, less "residual value" of 10% of "typical cost," was depreciated on a straight-line basis over a "service life" of 120 months. Depreciation commenced with the "in-service date" of the aircraft and was calculated on a daily basis during the first month and on a monthly basis thereafter. (If the in-service date was prior to the 16th of the month, that month was considered to be a full month in determining the number of months of remaining service life.) The costs of subsequent capitalized modifications were depreciated over the period beginning with the month following the expenditures for the modifications and terminating at the end of the service life of the airframe. It was assumed that expenditures for these modifications were made at the middle of the calendar quarter.

Reconstructed (R) provisions for depreciation of airframes have been substituted for historical (H) provisions for depreciation in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>Provisions for depreciation</u>	
		<u>R</u>	<u>H*</u>
1959	1	\$ .2	
	2	.8	
	3	1.4	
	4	1.4	
	Year total	<u>3.8</u>	
1960	1	1.5	
	2	1.4	\$ .1
	3	1.4	.2
	4	1.5	.3
	Year total	<u>5.8</u>	<u>.6</u>
1961	Year total	<u>5.8</u>	<u>6.4</u>
1962	Year total	<u>5.8</u>	<u>5.8</u>
1963	Year total	<u>5.9</u>	<u>5.8</u>
Total		<u>\$27.1</u>	<u>\$18.6</u>

\*Historically, all 15 aircraft were leased prior to purchase.

Depreciation of engines - Based upon historical depreciation policies, the reconstructed cost of each original engine, less residual value of 10% of typical cost of the engine type, was depreciated on a straight-line basis over a service life of 60 months through December 31, 1961 after which a service life of 120 months was used. This change coincides with a historical change made at that time. Service life began with the in-service dates of the aircraft.

The reconstructed cost of "spare engines," less residual value of 10%, was depreciated on a straight-line basis over the same service life as original engines, except that lives were shortened, where necessary, so as not to extend beyond the "common terminal date of the fleet." Depreciation commenced at the middle of the quarter in which the expenditures were made, but not earlier than the reconstructed in-service date of the first aircraft.



Reconstructed (R) provisions for depreciation of original and spare engines have been substituted for historical (H) provisions in the following periods:

Year	Quarter	Cumulative recon- structed number of aircraft in service	Cumulative reconstructed cost				Total engine depreciation	
			Original engines	Spare engines	Less - Engine retirements	Total	R	H
1958	4			\$1.0		\$ 1.0		
1959	1	3	\$1.8	2.2		4.0	\$ .1	
	2	12	7.0	4.8		11.8	.4	\$ .1
	3	15	8.8	5.9		14.7	.6	.2
	4	15	8.8	5.9		14.7	.7	.3
Year total							1.8	.6
1960	Year total	15	8.8	5.9		14.7	2.6	1.2
1961	Year total	15	8.8	5.9	\$ .6	14.1	2.6	2.7
1962	Year total	15	8.8	5.9	.7	14.0	.8	.8
1963	Year total	15	8.8	5.9	.7	14.0	.8	.8
Total							<u>\$8.6</u>	<u>\$6.1</u>

Depreciation of "other flight equipment" and rotatable parts -

Based upon historical depreciation policies, reconstructed costs of other flight equipment were depreciated, with no residual value, on a straight-line basis over a service life of 120 months. Depreciation commenced in the month following the date of purchase, but not prior to the month following the "midpoint month" (April 1959) of the fleet. The service life was shortened, where necessary, so as not to extend beyond the common terminal date of the fleet.

Reconstructed costs of rotatable parts were depreciated in the same manner as other flight equipment, except that engine rotatable parts were depreciated based on a service life of 60 months through December 31, 1961 after which a service life of 120 months was used.



Reconstructed (R) provisions for depreciation of other flight equipment and rotatable parts have been substituted for historical (H) provisions in the following periods:

<u>Cumulative reconstructed cost</u>								
<u>Year</u>	<u>Quarter</u>	<u>Cumulative reconstructed number of aircraft in service</u>	<u>Other flight equipment</u> <u>Installed equipment</u>	<u>Other</u>	<u>Rotatable parts</u>	<u>Less - retirements of rotatable parts</u>	<u>Total</u>	<u>Provision for depreciation</u> <u>R</u>
1958	4				\$ .9		\$ .9	
1959	1	3	\$ .2		2.0		2.2	
	2	12	.9		4.7		5.6	\$ .1*
	3	15	1.1	\$ .4	5.3		6.8	.3
	4	15	1.1	.4	5.7		7.2	.2
Year total								.6
1960	Year total	15	1.1	.4	6.4		7.9	1.1
1961	Year total	15	1.1	.2	7.1	\$ .4	8.0	1.1
1962	Year total	15	1.1	.2	7.4	.4	8.3	.7**
1963	Year total	15	1.1	.2	6.0	.5	6.8	.6
Total								\$4.1

\*Midpoint month was April 1959.

\*\*Prior to January 1, 1962, \$2.7 million of engine rotatable parts were depreciated over a service life of 60 months.

Obsolescence of expendable parts - Historically, TWA provided for obsolescence of expendable parts in amounts deemed sufficient to reduce the net carrying value of the expendable parts at the terminal date of the related aircraft type to estimated recoverable value at that time. Since reconstructed capital expenditures for expendable parts for this fleet are unchanged in total, it was assumed that reconstructed provisions for obsolescence of expendable parts are the same as historical provisions.

B331 jet aircraft:The assumptions

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures and in-service dates relating to:

- c. 12 B331 jet aircraft which are assumed to be acquired by TWA directly from Boeing and which historically consisted of:
  - 4 B331 jet aircraft historically leased and subsequently purchased from HT Co.
  - 1 B331 jet aircraft historically purchased from HT Co.
  - 7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon, and
  - 6 B331 jet aircraft which are assumed to have been acquired directly by TWA from Boeing and which historically were delivered to another airline.

Application of the assumptions

General - Adjustments made to historical financial data to apply the assumptions are described in the succeeding paragraphs. These adjustments resulted in an increase of \$19.1 million (from historical of \$27.5 million to reconstructed of \$46.6 million) in the provisions for depreciation of flight equipment and of \$.3 million in the provisions

for obsolescence of expendable parts. These increases are summarized as follows:

	<u>Provisions for</u>		
	<u>Depreciation of flight equipment</u>	<u>Obsolescence of expendable parts</u>	<u>Total</u>
Historical provisions	\$27.5	\$.4	\$27.9
Additional provisions relating to:- 12 aircraft:			
Direct purchase from Boeing, including \$.7 million depreciation of capitalized interest	2.1		2.1
Earlier in-service dates which averaged 127 days per aircraft, including \$.2 million depreciation of capitalized interest	2.2		2.2
	31.8	.4	32.2
6 additional aircraft, including \$.3 million depreciation of capitalized interest	14.8	.3	15.1
Reconstructed provisions	\$46.6	\$.7	\$47.3

Depreciation of airframes - Reconstructed airframe costs for the 18 aircraft are summarized as follows:

Capital expenditures for aircraft (including \$.9 of subsequent capitalized modifications)		\$101.9
<u>Deduct:</u>		
Original engines, depreciated separately as engines		\$15.3
Installed equipment, depreciated separately as other flight equipment	1.7	17.0
		84.9
<u>Add - Capitalized interest</u>		3.2
Airframe costs		\$ 88.1

\*Does not include capitalized interest of \$.1 million on deposits for spare engines.

Reconstructed (R) provisions for depreciation of airframes were calculated in the same manner as for B131 aircraft and have been substituted for historical (H) provisions for depreciation in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>Cumulative number of aircraft in service</u>		<u>Provisions for depreciation</u>	
		<u>R</u>	<u>H*</u>	<u>R</u>	<u>H*</u>
1959	3	3		\$ .1	
	4	9	3	.7	
	Year total			.8	
1960	1	12	5	1.2	
	2	17	10	1.5	\$ .4
	3	18	12	2.0	.9
	4	18	12	2.0	.9
	Year total			6.7	2.2
1961	Year total	18	12	8.0	5.5
1962	Year total	18	12	7.8	5.3
1963	Year total	18	12	8.0	5.2
	Total			\$31.3	\$18.2

\*Historically, 4 aircraft were leased prior to purchase at December 30, 1960.

Depreciation of engines - Reconstructed provisions for depreciation of original and spare engines were calculated in the same manner as for B131 aircraft except that the service life was 84 months through December 31, 1961 after which a service life of 120 months was used. Reconstructed modifications of \$.8 million were assumed to relate to spare engines and were depreciated commencing in the month following the modification.



Reconstructed (R) provisions for depreciation of original and spare engines have been substituted for historical (H) provisions in the following periods:

		<u>Cumulative reconstructed cost</u>					Total engine depreciation
<u>Year</u>	<u>Quarter</u>	<u>Cumulative reconstructed number of aircraft in service</u>	<u>Original engines</u>	<u>Spare engines (including capitalized modifications)</u>	<u>Less - Engine retirements</u>	<u>Total</u>	
1959	3	3	\$ 2.5	\$ 3.0		\$ 5.5	
	4	9	7.7	6.8*		14.5	\$ .4
1960	1	12	10.2	8.3		18.5	.6
	2	17	14.5	10.8	\$1.2	24.1	.6
	3	18	15.3	11.7	1.2	25.8	.8
	4	18	15.3	11.7	1.2	25.8	.8
Year total							2.8
1961	Year total	18	15.3	11.7	1.2	25.8	3.3
1962	Year total	18	15.3	12.2	1.2	26.3	2.1
1963	Year total	18	15.3	12.2	1.2	26.3	2.3
Total							\$10.9

\*Includes \$.1 million of capitalized interest.

Depreciation of other flight equipment and rotatable parts -

Reconstructed costs of other flight equipment and rotatable parts were depreciated in the same manner as those related to the B131 fleet, described above, except that engine rotatable parts were depreciated based on a service life of 84 months through December 31, 1961 after which a service life of 120 months was used.



Reconstructed (R) provisions for depreciation of other flight equipment and rotatable parts have been substituted for historical (H) provisions in the following periods:

Year	Quarter	Cumulative reconstructed number of aircraft in service	Cumulative reconstructed cost				Provisions for depreciation	
			Other flight equipment Installed	Other	Rotable parts	Less - retirements of rotatable parts	Total	R      H
1959	2							
	3	3	\$ .3		\$ .4		\$ .4	
	4	9	.9		1.3		1.6	
					1.4		2.3	
1960	1	12	1.2	\$ .3	5.3		6.8	\$ .1*
	2	17	1.7	.4	6.5		8.6	.2      \$ .1
	3	18	1.7	.5	7.2		9.4	.3      .1
	4	18	1.7	.1	8.3		10.1	.2      .2
Year total								
1961	Year total	18	1.7	.1	9.5	\$ .1	11.2	.8      .4
1962	Year total	18	1.7	.1	10.3	.1	12.0	1.3      .9
1963	Year total	18	1.7	.1	10.0	.2	11.6	1.2**      .8
Total								
								<u>\$4.4      \$2.9</u>

\*Midpoint month was January 1960.

\*\*Prior to January 1, 1962, \$4.3 million of engine rotatable parts were depreciated over a service life of 84 months.

Obsolescence of expendable parts - Reconstructed provisions for obsolescence of expendable parts were calculated (in conformity with advice from Coverdale & Colpitts) by increasing historical provisions by 50% and recording them one quarter earlier than historical provisions, in the same manner as reconstructed capital expenditures for expendable parts.

Reconstructed (R) provisions for obsolescence have been substituted for historical (H) provisions in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>R</u>	<u>H</u>
1960	2	\$ .1	
	4	<u>.1</u>	<u>\$ .1</u>
	Year total	<u>.2</u>	<u>.1</u>
1961	2	.1	
	3	<u>.1</u>	<u>.1</u>
	Year total	<u>.2</u>	<u>.1</u>
1962	2	<u>.1</u>	
1963	3	.1	.1
	4	<u>.1</u>	<u>.1</u>
	Year total	<u>.2</u>	<u>.2</u>
	Total	<u>\$ .7</u>	<u>\$ .4</u>

B331B jet aircraft:

The assumption

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures and in-service dates relating to:

- d. 5 B331B jet aircraft which are assumed not to have been leased in 1962 and 1963. In addition, 20 engines for such aircraft are assumed not to be leased and subsequently purchased and no other capital expenditures are assumed to be incurred.

Application of the assumption

Since historical capital expenditures for the B331B fleet were excluded on a reconstructed basis, historical provisions for depreciation of flight equipment of \$.3 million were excluded from reconstructed provisions for depreciation.

CV880 jet aircraft:The assumptions

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures and in-service dates relating to:

- e. 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956 (20 of which were historically acquired by TWA in 1960 and 1961 and 6 of which were historically acquired in a used condition by TWA in 1963).

Application of the assumptions

General - Adjustments made to historical financial data to apply the assumptions are described in the succeeding paragraphs. These adjustments resulted in an increase of \$21.8 million (from historical of \$24.7 million for 20 aircraft to reconstructed of \$46.5 million for 30 aircraft) in the provisions for depreciation of flight equipment and of \$.3 million in the provisions for obsolescence of expendable parts. (Historical provisions for depreciation of \$.6 million, relating to 6 CV880 used jet aircraft purchased in 1963 are excluded from reconstructed provisions for depreciation.) These increases are summarized as follows:

	<u>Provisions for</u>		
	<u>Depreciation of flight equipment</u>	<u>Obsolescence of expendable parts</u>	<u>Total</u>
Historical provisions, 20 aircraft	\$24.7	\$.2	\$24.9
Additional provisions relating to:			
20 aircraft - Earlier in-service dates which averaged 299 days per aircraft, including \$.8 million depreciation of capitalized interest	6.3	.1	6.4
	31.0	.3	31.3
10 additional aircraft, including \$.4 million depreciation of capitalized interest	15.5	.2	15.7
Reconstructed provisions, 30 aircraft	\$46.5	\$.5	\$47.0

Depreciation of airframes - Reconstructed airframe costs for the 30 aircraft are summarized as follows:

Capital expenditures for aircraft (including \$3 million of subsequent capitalized modifications)	\$117.0
<u>Deduct:</u>	
Original engines, depreciated separately as engines	\$17.2
Installed equipment, depreciated separately as other flight equipment	<u>1.7</u>
	18.9
	98.1
<u>Add - Capitalized interest</u>	<u>3.9</u>
Airframe costs	<u>\$102.0</u>

Reconstructed (R) provisions for depreciation of airframes were calculated in the same manner as for B131 aircraft and have been substituted for historical (H) provisions for depreciation in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>Cumulative number of aircraft in service</u>		<u>Provisions for depreciation</u>	
		<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>
1960	2	16		\$ .5	
	3	30		1.8	
	4	30		<u>2.3</u>	
	Year total			<u>4.6</u>	
1961	1	30	10	2.3	\$ .5
	2	30	16	2.3	1.1
	3	30	19	2.3	1.4
	4	30	20	<u>2.3</u>	<u>1.9</u>
	Year total			<u>9.2</u>	<u>4.9</u>
1962	Year total	30	20	<u>9.3</u>	<u>6.8</u>
1963	Year total	30	20	<u>8.8</u>	<u>5.4</u>
	Total			<u>\$31.9</u>	<u>\$17.1</u>



The historical provisions for depreciation of \$.5 million, relating to 6 used aircraft acquired in 1963, have been excluded from the reconstructed provisions for depreciation.

Depreciation of engines - Reconstructed provisions for depreciation of original and spare engines were calculated in the same manner as for B131 aircraft except that the service life was 84 months through December 31, 1961 after which a service life of 120 months was used.

Reconstructed (R) provisions for depreciation of original and spare engines have been substituted for historical (H) provisions in the following periods:

<u>Year</u>	<u>Quarter</u>	Cumulative recon- structed number of aircraft in <u>service</u>	<u>Cumulative reconstructed cost</u>			<u>Total engine depreciation</u>	
			<u>Original engines</u>	<u>Spare engines</u>	<u>Less - engine retirements</u>	<u>Total</u>	<u>R</u> <u>H</u>
1959	3			\$ .3		\$ .3	
	4			2.6		2.6	
1960	1			5.2		5.2	
	2	16	\$ 9.1	7.8		16.9	\$ .2
	3	30	17.2	8.3		25.5	.7
	4	30	17.2	8.3		25.5	.8
Year total							1.7
1961	1	30	17.2	8.3		25.5	.9 \$ .2
	2	30	17.2	8.3		25.5	.8 .3
	3	30	17.2	8.3		25.5	.8 .3
	4	30	17.2	8.3		25.5	.8 .3
Year total							3.3 1.7
1962 Year total		30	17.2	8.3		25.5	2.1 1.3
1963 Year total		30	17.2	8.3	\$ .4	25.1	2.1 1.6
Total							\$9.2 \$4.8

The historical provisions for depreciation of \$.1 million, relating to 6 used aircraft acquired in 1963, have been excluded from the reconstructed provisions for depreciation.

Depreciation of other flight equipment and rotatable parts -

Reconstructed costs of other flight equipment and rotatable parts were depreciated in the same manner as those related to the B131 fleet except that engine rotatable parts were depreciated based on a service life of 84 months through December 31, 1961 after which a service life of 120 months was used.

Reconstructed (R) depreciation provisions for other flight equipment and rotatable parts have been substituted for historical (H) provisions for depreciation in the following periods:

<u>Cumulative reconstructed cost</u>									
Year	Quar- ter	Cumulative recon- structed number of aircraft in service	Other flight equipment		Rotable parts	Less - retire- ments of rotable parts	Total	Provisions for depre- ciation	
			Installed equipment	Other				R	H
1959	3			\$ .5	\$ 1.0		\$ 1.5		
	4			.7	2.6		3.3		
1960	1			1.2	3.9		5.1		
	2	16	\$ .9	.5	6.5		7.9		
	3	30	1.7	.5	8.7		10.9	\$ .2*	
	4	30	1.7	.6	9.8		12.1	.4	
Year total								.6	
1961	1	30	1.7	.6	10.7		13.0	.3	\$ .1
	2	30	1.7	.6	11.6		13.9	.5	.2
	3	30	1.7	.7	11.8		14.2	.4	.3
	4	30	1.7	.7	12.3		14.7	.4	.3
Year total								1.6	.9
1962 Year total		30	1.7	.7	12.9	\$ .1	15.2	1.6**	1.1
1963 Year total		30	1.7	.7	13.0	.1	15.3	1.6	.8
Total								\$5.4	\$2.8

\*Midpoint month was July 1960.

\*\*Prior to January 1, 1962, \$5.6 million of engine rotatable parts were depreciated over an 84-month life.

Obsolescence of expendable parts - Reconstructed provisions for obsolescence of expendable parts were calculated (in conformity with advice from Coverdale & Colpitts) by increasing historical provisions by 50% and recording them three quarters earlier than historical provisions, in the same manner as reconstructed expenditures for expendable parts.

Reconstructed (R) provisions for obsolescence have been substituted for historical (H) provisions in the following periods:

<u>Year</u>	<u>Quarter</u>	<u>R</u>	<u>H</u>
1961	1	\$ .1	
	4	<u>.1</u>	<u>\$ .1</u>
	Year total	<u>.2</u>	<u>.1</u>
1962	1	<u>.1</u>	
1963	1	.1	.1
	4	<u>.1</u>	
	Year total	<u>.2</u>	<u>.1</u>
	Total	<u>\$ .5</u>	<u>\$ .2</u>

B131B jet aircraft:

Since reconstructed deposits with manufacturers for B131B jet aircraft would have been financed from general funds there was no reconstructed capitalized interest thereon. (See capitalized interest under subsection E.) Accordingly, the amount of depreciation (\$.2 million) related to the historically capitalized interest of \$1.6 million was excluded from the reconstructed provisions for depreciation of B131B aircraft.

Ground property and equipment:The assumption

F2. Provisions for depreciation and obsolescence of property and equipment are to be reconstructed to give effect to assumed changes (which also appear as parts of Assumption E) in capital expenditures relating to:

- f. The assumed earlier and additional expenditures for certain ground property and equipment relating to or resulting from the changes in TWA's jet fleet which were reconstructed as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

Application of the assumption

Provisions for reconstructed depreciation of ground property and equipment were determined by adding to or deducting from historical depreciation provisions the amount of depreciation resulting from the effect of the adjustments to capital expenditures for ground property and equipment. Consistent with historical methods, depreciation was calculated on a straight-line basis, with no residual value, over historical service lives. It was assumed that the increase or decrease in capital expenditures occurred at the middle of a calendar quarter and provisions for depreciation commenced in the second month of the calendar quarter.

In the reconstructed financial statements, reconstructed provisions for depreciation of ground property and equipment have been substituted for historical provisions. Application of the assumption resulted in an increase of \$1.1 million in provisions for depreciation of ground property and equipment.



Nonoperating property and equipment:

Since on a reconstructed basis an amount equivalent to the value historically assigned to the 5 M202 aircraft received as trade-ins has been considered to be proceeds from sales of flight equipment and included in reconstructed funds restricted for flight equipment purchases (see subsection G hereinafter), no amount was included in reconstructed nonoperating property and equipment. Accordingly, historical depreciation of \$.4 million was excluded from reconstructed depreciation of nonoperating property and equipment.

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL PROVISIONS FOR  
OBsolescence OF EXPENDABLE PARTS

FOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

	<u>Years ended December 31.</u>										<u>Increase</u>		
	<u>1959</u>		<u>1960</u>		<u>1961</u>		<u>1962</u>		<u>1963</u>		<u>Total</u>	<u>(decrease)</u>	
	<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>	<u>R</u>	<u>H</u>	<u>over</u>
													<u>historical</u>
at fleet:													
B131			\$ .1	\$ .1	\$ .3	\$ .3	\$ .2	\$ .2	\$ .1	\$ .1	\$ .7	\$ .7	
B331			.2	.1	.2	.1	.1		.2	.2	.7	.4	\$ .3
CV880 (new)					.2	.1	.1		.2	.1	.5	.2	.3
B131B**							.1	.1			.1	.1	
B720B**					.1	.1	.1	.1			.2	.2	
Total			.3	.2	.8	.6	.6	.4	.5	.4	2.2	1.6	.6
ston fleet**	\$ .2	\$ .2	1.6	1.6	.1	.1	.3	.3	.3	.3	2.5	2.5	
Total:													
<u>Schedule F</u>	\$ .2	\$ .2	\$ 1.9	\$ 1.8	\$ .9	\$ .7	\$ .9	\$ .7	\$ .8	\$ .7	\$ 4.7	\$ 4.1	\$ .6

\*\*Reconstructed and historical amounts are assumed to be identical.

Legend:

R - Reconstructed

H - Historical

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL SERVICE LIVES AND COMMON  
TERMINAL DATES USED FOR CALCULATION OF DEPRECIATION OF  
B131, B331 AND CV880 JET FLIGHT EQUIPMENT

		<u>Service lives in months</u>		Other flight equipment and rotatable <u>parts</u>	Common terminal <u>dates</u>  <u>R</u> <u>H</u>
		<u>Airframes</u>	<u>Engines</u>		
Prior to January 1, 1962:-					
B131:					
Airframes	120		120	4/69 6/69	
Engines		60	60	4/64 6/64	
B331:					
Airframes	120		120	1/70 3/70	
Engines		84	84	1/67 3/67	
CV880:					
Airframes	120		120	6/70 2/71	
Engines		84	84	6/67 2/68	
January 1, 1962 - December 31, 1963:					
B131	120	120	120	4/69 6/69	
B331	120	120	120	1/70 3/70	
CV880	120	120	120	6/70 2/71	

Legend:  
R - Reconstructed  
H - Historical

TRANS WORLD AIRLINES.. INC.TERMS RELATED TO DEPRECIATIONDEFINITIONS FOR PURPOSES OF THIS SUBSECTION

Common terminal date of the fleet - the last month of a period commencing with the month following the "midpoint month" and extending over the "service life" of the airframe or engine type.

In-service date - the date at which an aircraft is first placed in scheduled (revenue) service.

Installed equipment - communications and navigational equipment and miscellaneous flight equipment installed in the aircraft at time of acquisition by TWA.

Midpoint date (of a fleet) - the date midway between the first in-service date and the last scheduled delivery date of the aircraft in the initial fleet purchase of an aircraft type.

Midpoint month (of a fleet) - the month in which the "midpoint date" occurs (if the midpoint date is prior to the 16th of the month, the "midpoint month" is the preceding month).

Original engines - the engines installed on the aircraft at time of acquisition by TWA.

Other flight equipment - installed equipment and capital expenditures described as other on Schedule E-3a.

Residual value - the estimated recoverable value at the end of a "service life".

Service life - the period over which a capital asset is depreciated.

Spare engines - engines acquired as separate units (as contrasted to original engines).

Typical cost - the net cost of an airframe or engine, estimated to be representative of the new unit cost of all airframes or engines in the initial fleet purchase of an aircraft type.

**G. Gain (loss) on sales or retirements  
of property and equipment and  
collection of related proceeds:**

**C o n t e n t s**

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**Schedules**



Gain (loss) on sales or retirements of  
flight equipment with earlier sales dates:The assumption

G1. The gain (loss) on sales or retirements of property and equipment is to be reconstructed to give effect to:

- a. The reconstructed sales dates and contract values for 103 piston aircraft as set forth in the report and a related schedule prepared for use in this proceeding by R. Dixon Speas Associates (RDSA), consultants in airline operations, and constituting Appendices D and E hereto.

Application of the assumption

Proceeds - Reconstructed proceeds from sales of 103 piston aircraft were obtained from Appendix E hereto, prepared by RDSA. Corresponding historical proceeds were excluded.

A reconciliation of historical and reconstructed proceeds is as follows:

Historical (Schedule G)	\$15.5
<u>Add back</u> - Reduction of historical proceeds resulting from repossession of 5 piston aircraft, considered to be a disposition of receivables, see page 88	<u>3.0</u>
	18.5
<u>Add</u> - Increased realization shown by RDSA	<u>6.9</u>
Reconstructed (Schedule G)	<u>\$25.4</u>

Cost - In the reconstructed financial statements, the property accounts were relieved of the gross costs of the airframes, engines, propellers and communications and navigational equipment in the calendar quarters in which the related reconstructed proceeds were recorded. It was assumed that historical cost adjustments, primarily modifications, that occurred between historical and the earlier reconstructed retirement dates would have taken place at the earlier dates. The difference of \$2.8 million between cost reliefs historically reported by TWA and reconstructed cost reliefs is set forth below:

Historical cost reliefs (Schedule G)	\$92.1
<u>Add</u> - Amount historically reported by TWA as a deduction from cost reliefs on recapitalization of repossessed aircraft	3.0
<u>Deduct</u> - Reduction in cost of L1649A and L1049G piston airframes resulting from assumed reductions in capital expenditures	(.2)
Reconstructed cost reliefs (Schedule G)	<u>\$94.9</u>

Reserves for depreciation - It was assumed that reliefs of reserves for depreciation attributable to the 103 aircraft should be adjusted to include the effect of (a) assumed reconstructed cost adjustments and (b) any provisions for depreciation historically recorded between the historical dates of retirements and the earlier reconstructed dates. This latter adjustment is referred to herein as "depreciation rollback." For airframes and engines, the depreciation rollback was calculated by reference to the property ledgers which set forth depreciation for specific airframes and engines identified by serial number. Since it was impracticable to identify specific propellers and communications and navigational equipment, depreciation rollback for these categories was calculated by applying the reduction in the percentage of net book value to cost of all such equipment between the reconstructed and historical months of sale to the historical cost of the equipment sold. (For example, if the cost of all propellers and communications equipment were \$1,000 and the aggregate net book values were \$600 at the historical sales date and \$800 at the reconstructed sales date, reduction in percentage would be 20%; this reduction, applied to historical cost of propellers and communications and navigational equipment under study of say \$100 would yield a rollback of \$20.)

For each transaction, the depreciation rollback was excluded from the calendar quarters in which it was historically recorded. The aggregate depreciation rollback is summarized as follows:

	<u>Reductions in historical</u>		
	<u>Provisions for depreciation</u>	<u>1961 special item</u>	<u>Total</u>
Airframes	\$2.9	\$ .5	\$3.4
Engines	.5	.1	.6
Propellers and communications and navigational equipment	.3		.3
	<u>\$3.7</u>	<u>\$ .6</u>	<u>\$4.3</u>

After calculation of the adjustment for depreciation rollback, reserves for depreciation were further adjusted to include the effect of reductions in cost of L1649A and L1049G piston airframes. Reliefs of the reconstructed reserves for depreciation were shifted in time to the calendar quarters in which the related reconstructed costs were retired. The difference of \$4.4 million between reliefs of reserves for depreciation historically reported by TWA and reconstructed reliefs of reserves for depreciation is set forth below:

Historical reliefs of reserves for depreciation (Schedule G)		\$79.5
<u>Deduct:</u>		
Depreciation rollback, as above	(\$4.3)	
Reduction in reserves resulting from reduced cost of L1649A and L1049G	(.1)	
		<u>(4.4)</u>
Reconstructed reliefs of reserves (Schedule G)		<u>\$75.1</u>

Summary - The change in gain on sales or retirements of flight equipment with earlier sales dates, resulting from the adjustments described above, is summarized as follows (see Schedule G):

	<u>Proceeds</u>	<u>Cost</u>	<u>Reserves for depreciation</u>	<u>Net book value</u>	<u>Gain</u>
Historical	\$15.5	\$92.1	\$79.5	\$12.6	\$2.9
Adjustments	9.9	2.8	(4.4)	7.2	2.7
Reconstructed	<u>\$25.4</u>	<u>\$94.9</u>	<u>\$75.1</u>	<u>\$19.8</u>	<u>\$5.6</u>

Historically, in 1961 loss on sale of certain piston aircraft was reclassified to the special charge. A similar reclassification relating to aircraft with earlier sales dates was not made on a reconstructed basis since the related aircraft are assumed to be sold prior to 1961.

Gain (loss) on sales or retirements  
of other flight equipment:

The assumption

G1. The gain (loss) on sales or retirements of property and equipment is to be reconstructed to give effect to:

- b. Reconstructed capital expenditures and reconstructed provisions for depreciation, as applicable.

Application of the assumption

Piston aircraft - As set forth in subsection E of this report reconstructed costs were determined by reducing historical costs for twenty-five L1649A and eight L1049G aircraft for certain payments to HT Co. described as "interest." Appropriate adjustments were made to reconstructed provisions for depreciation (and related reserves for depreciation) and, where applicable, to gain (loss) on sales or retirement. Consequently, cost and reserves for depreciation of piston aircraft with earlier sales dates were reduced by \$.2 million and \$.1 million, respectively, as shown on pages 77 and 78. In addition, the cost and reserves for depreciation of other piston aircraft sold reflected a reduction of \$.2 million and \$.1 million, respectively.

Jet aircraft - As set forth in subsection E of this report, reconstructed capital expenditures reflect assumed earlier delivery dates of B131, B331 and CV880 jet fleets, increases in B331 and CV880 fleet size, and exclusion of 5 leased B331B aircraft and 6 used CV880 aircraft. Although there were no historical sales or retirements of jet aircraft through December 31, 1963, there were cannibalizations and retirements of jet engines and rotatable parts. It was assumed, with your concurrence, that historical gain (loss) recorded on retirements of property should be adjusted to give effect to these changes in capital expenditures as set forth below.

Proceeds: Historical proceeds from dispositions of B331 and CV880 engines were increased by 50% and recorded one calendar quarter earlier and three calendar quarters earlier, respectively. No changes were made with respect to B131 engines.



Historical proceeds from dispositions of B331 and CV880 rotatable parts were increased by 50% and recorded one calendar quarter earlier and three calendar quarters earlier, respectively. No changes were made to proceeds from dispositions of B131 parts. Proceeds from dispositions of B331B rotatable parts were excluded. Since historical proceeds from retirements of rotatable parts were not identified by plane type, historical calendar quarter proceeds were allocated to plane types in proportion to the net book values of rotatable parts retired.

Cost: For B131, B331 and CV880 engines, reconstructed costs of engines retired were calculated by multiplying the average reconstructed cost per engine by the historical number of B131 engines retired and by 150% of the historical number of B331 and CV880 engines retired. Reconstructed cost reliefs for dispositions of B331 and CV880 engines were recorded one calendar quarter earlier and three calendar quarters earlier, respectively. No change was made to timing of B131 cost reliefs.

Historical cost reliefs of B331 and CV880 rotatable parts retired were increased by 50% and recorded one calendar quarter earlier and three calendar quarters earlier, respectively. No change was made in B131 cost reliefs. B331B cost reliefs were excluded.

Reserves for depreciation: Reliefs of accumulated reconstructed reserves for depreciation for dispositions of engines and rotatable parts were recorded in the reconstructed calendar quarters of retirement for the B131, B331 and CV880 engines and rotatable parts retired. B331B reliefs of reserves were excluded.



Summary - The piston and jet adjustments described above increased gain on retirements of other flight equipment by \$.2 million as follows:

	<u>Proceeds</u>	<u>Cost</u>	<u>Reserves for depreciation</u>	<u>Net book value</u>	<u>Gain</u>
Historical (Schedule G)	\$14.9	\$49.6	\$37.3	\$12.3	\$2.6
Piston aircraft:					
Reduction in cost and related reserves for depreciation of other piston aircraft (see page 79)		(.2)	(.1)	(.1)	.1
Reduction in gross cost and related reserve for depreciation of one repossessed piston aircraft sold in 1963 (see page 88)		(.2)	(.2)		
Jet aircraft - effect of assumed changed retirements of:					
Jet engines	.7	1.1	.4	.7	
Jet rotatable parts	.1	.1	.1		.1
	.8	.8	.2	.6	.2
Reconstructed (Schedule G)	\$15.7	\$50.4	\$37.5	\$12.9	\$2.8

Gain (loss) on sales or retirements of  
ground property and equipment and  
nonoperating property and equipment:

Five M202 aircraft historically received as trade-ins and subsequently sold are assumed for purposes of this report to be a part of the collection experience related to the sale of M404 aircraft for which the trade-ins were received (see table on page 84). Accordingly, the subsequent historical sales of this nonoperating property have been excluded. The amounts excluded are as follows (see Schedule G):

Proceeds	\$ .1
<u>Less:</u>	
Cost	\$ .5
Reserve	<u>(.4)</u>
	<u>.1</u>
Gain	<u>=</u>

No other adjustments were made to sales or retirements of ground property and equipment and nonoperating property and equipment.

Collection of proceeds from sales or retirements of property and equipment:The assumption

G2. The amount and timing of collections of proceeds from sales or retirements of property and equipment are to be reconstructed based upon average historical collection experience relating to such property and equipment.

Application of the assumptionIntroduction:

Under the terms of the reconstructed flight equipment mortgage, reconstructed proceeds from the sales of flight equipment are to be paid into the flight equipment fund. In the reconstructed financial statements all proceeds from sales of flight equipment were recorded as additions to a restricted receivable (funds restricted for purchases of flight equipment - other) and cash collections thereof were transferred to the flight equipment fund. Reconstructed amounts added to the restricted receivable are as follows (see Schedule G-1 attached):

Reconstructed proceeds from sales of flight equipment with earlier sales dates	\$25.4
Reconstructed proceeds from sales of other flight equipment	<u>15.7</u>
Total reconstructed proceeds	41.1
Reconstructed and historical deferred installment gain at December 31, 1963 attributable to other flight equipment, not yet reported as proceeds	<u>.2</u>
Total reconstructed additions to the restricted receivable	<u>\$41.3</u>

For simplicity of calculation, we have assumed, with your concurrence, that proceeds from sales of expendable parts were added to net current assets, rather than to the restricted receivable, because (a) it was impracticable to determine the proceeds of sales of expendable parts except for those sold under contracts for flight equipment with earlier sales dates, and (b) with respect to these latter contracts, it was impracticable to allocate historical collections of long-term receivables to expendable parts.

Collection of proceeds from sales of flight  
equipment with earlier sales dates:

Collections by calendar quarter of reconstructed proceeds from sales of the 103 piston aircraft were calculated by applying average historical collection experience on these sales to the reconstructed proceeds. Calculation of reconstructed collections consisted of: (a) analysis of historical collection experience relating to sales of the 103 aircraft; (b) restatement of historical collection experience on the common basis of number of calendar quarters elapsed since date of sale (described herein as the "homogeneous basis") and computation of the average calendar quarter collection experience expressed as a percentage of the total amount of the contracts; and (c) application of restated average quarterly collection experience to reconstructed proceeds and calculation of the resulting reconstructed collections and bad debts.

Each of these steps is described in this section.

Historical collection experience - Historical gross contract values of \$20.9 million on the sales of the 103 aircraft were accounted for as follows:

Gross contract values		\$20.9
<u>Less</u> - Uncollected receivables, accounted for as:-		
Bad debts charged to:		
Gain from operations	\$ .7	
Other income - net	.9	
1961 special item	.2	
Gain on sales or retirements of property and equipment	.1	
Write-offs against deferred instalment gain	.2	
Charge included in 1961 special item as revision of service lives and residual values, relating to repossessed aircraft	2.7	
Depreciation and loss on sales of five M202 aircraft received as trade-ins (nonoperating property)	.4	
		<u>5.2</u>
Total "collections"		<u>\$15.7</u>
Collections comprised:		
Cash collections from customers (including spare parts valued at \$.3 million considered as the equivalent of cash)		\$15.3
Cash sales value of five M202 aircraft received as trade-ins		.1
Net recapitalized value of five repossessed aircraft returned to revenue service (see page 88)		.3
Total "collections"		<u>\$15.7</u>

The amounts used to calculate the average historical collection experience percentage, to be applied to reconstructed proceeds, are summarized as follows:

	Gross contract values	Collections	Uncollected receivables
Historical amounts shown in preceding table	\$20.9	\$15.7	\$5.2
<u>Deduct:</u>			
Bad debts charged to gain on sale of property (a)	(.1)		(.1)
Uncollected receivables written off against deferred instalment gains (b)	(.2)		(.2)
Base (see Schedule G-3)	<u>\$20.6</u>	<u>\$15.7</u>	<u>\$4.9</u>
Percentage	100%	75.9%	24.1%

(a) This amount is excluded from the base since it was historically reported by TWA as a deduction from proceeds and is already deducted from RDSA reconstructed proceeds.

(b) These write-offs are excluded from the base since the original deferred gains had not been historically reported by TWA as proceeds and are excluded from RDSA reconstructed proceeds.

A reconciliation between the gross contract values used as historical collection base of \$20.6 million and the actual contract values of \$18.5 million, shown by RDSA, follows:

Historical collection base	\$20.6
<u>Deduct:</u>	
Contract values attributable to expendable parts	\$1.0*
Contract values historically treated as reimbursement of selling expenses	.6*
Proceeds attributable to miscellaneous flight equipment, rotatable parts and certain spare engines, not included in RDSA amounts	<u>.6</u>
	<u>2.2</u>
	18.4
<u>Add</u> - Difference between historical proceeds allocated to propellers and communications and navigational equipment by RDSA and actual contract amounts	<u>.1</u>
Actual contract values shown by RDSA	<u>\$18.5</u>

\*Amount not historically reported by TWA as net proceeds from sales of property and equipment.



Restatement of historical collection experience on a common time basis - This calculation forms the basis for calculation of assumed calendar quarter collections of reconstructed proceeds. Since specific customers or contracts were not identifiable on a reconstructed basis, reconstructed timing of collections and write-offs of bad debts are based upon average historical timing of collections; reconstructed bad debts are assumed to be written off in the calendar quarter following the last reconstructed collection of cash or property but not later than December 31, 1963.

In order to calculate average timing of historical collections, all historical contracts were restated on the same basis in terms of elapsed time (the "homogeneous basis"). This is illustrated below, using nominal amounts:

<u>H i s t o r i c a l</u>					
<u>Year</u>	<u>Month</u>	<u>Total</u>	<u>Contract A</u>	<u>Contract B</u>	<u>Contract C</u>
1959	December		*		
1960	January	\$100		\$100*(1)	
	February	50		50 (2)	
	March	150	\$150(1)		
	April	150	150(2)		
	May				*
	June	200			\$200(1)
	July	<u>75</u>			75(2)
		<u>\$725</u>			

<u>H o m o g e n e o u s</u>				
<u>Month</u>	<u>Total</u>	<u>Contract A</u>	<u>Contract B</u>	<u>Contract C</u>
0	\$100	*	\$100*(1)	*
1	250		50 (2)	\$200(1)
2	75			75(2)
3	150	\$150(1)		
4	<u>150</u>	150(2)		
	<u>\$725</u>			

\*Date of contract

(1) First payment

(2) Second payment

The result of analyzing all historical collections in the manner illustrated is set forth on Schedule G-3. A summary is as follows:

<u>Homogeneous</u>			
<u>Calendar quarter</u>	<u>Months</u>	<u>Amount</u>	<u>%</u>
0	0- 2	\$ 5.4	26.2%
1	3- 5	1.0	5.1
2	6- 8	1.4	6.6
3	9-11	1.3	6.4
4	12-14	1.0	5.0
5	15-17	1.9	9.0
6	18-20	1.1	5.3
7	21-23	1.7	8.1
8	24-26	.1	.5
9	27-29	.1	.3
10	30-32	.1	.3
11	33-35	.1	.3
12	36-38	.1	.3
13-18*	39-56	.5	2.5
Total collections		15.7	75.9
Total uncollected receivables		4.9	24.1
Aggregate adjusted contract values		<u>\$20.6</u>	<u>100.0%</u>

\*Calendar quarters 13 to 18 are grouped in order to effect all collections and recognize all bad debts by December 31, 1963.

Application of restated historical collection experience to reconstructed proceeds - The result of applying average quarterly historical collection percentages to the quarterly reconstructed proceeds is summarized as follows:

<u>Reconstructed</u>		<u>Reconstructed collections</u>			<u>Reconstructed bad debts</u>		
<u>Quarter</u>	<u>Proceeds</u>	<u>Period</u>	<u>Amount</u>	<u>%</u>	<u>Period</u>	<u>Amount</u>	<u>%</u>
4th 1958	\$ 1.2	4th 1958-1st 1962	\$ 1.0	75.9%	2nd 1962	\$ .2	24.1%
1st 1959	.3	1st 1959-2nd	.2	"	3rd	.1	"
2nd	1.7	2nd -3rd	1.3	"	4th	.4	"
3rd	3.8	3rd -4th	2.9	"	1st 1963	.9	"
4th	4.4	4th -1st 1963	3.3	"	2nd	1.1	"
1st 1960	.6	1st 1960-2nd	.4	"	3rd	.2	"
2nd	9.4	2nd -3rd	7.1	"	4th	2.3	"
3rd	4.0	3rd -4th	3.1	"	4th	.9	"
	<u>\$25.4</u>		<u>\$19.3</u>			<u>\$6.1</u>	

Schedule G-2 presents the details of these figures by calendar quarter.

Of the reconstructed proceeds of \$25.4 million added to the restricted receivable for flight equipment purchases, \$19.3 million was assumed to be collected and \$6.1 million was charged to reconstructed nonoperating income as bad debts. Of the \$19.3 million of collections, \$19.0 million, assumed to represent cash, was added to the flight equipment fund and \$.3 million, equal to historical net recapitalized value of repossessed aircraft (see page 84), was charged to flight equipment in 1961 at the same time that the aircraft were historically repossessed. The net recapitalized value of these aircraft is summarized as follows:

Gross recapitalized value, historically reported by TWA as reduction of proceeds (see page 76)	\$3.0
Amount charged to historical 1961 special item as revision of service lives and residual values of piston aircraft	<u>2.7</u>
Net recapitalized value	<u>\$ .3</u>

The result of recording these aircraft in the reconstructed financial statements at net recapitalized value was to reduce by \$.2 million each the gross cost and related reserve for depreciation written off in 1963 when one of these aircraft was sold (see page 81).

Collection of proceeds on sales of other  
flight equipment:

It is assumed that calendar quarter collections of proceeds attributable to flight equipment other than that with earlier sales dates would have been the same as the amount of proceeds historically reported by TWA, adjusted for the net changes in related historical long-term receivables (the net amount thus representing the historical increase in net current assets). Since it was impracticable to distinguish such increases in net current assets as between cash and short-term receivables, it is assumed that these increases represent cash and accordingly they were treated in the reconstructed financial statements as transfers to the flight equipment fund.

It is assumed that increased proceeds from sales of jet property were collected in cash at the time of sale since historical dispositions resulted solely in increases in net current assets.

Reconstructed cash collections on these items are summarized on Schedule G-1.

TWA Ex. 7(b)(2), Schedule G-4  
(Price Waterhouse Study - Volume Two)

TRANS WORLD AIRLINES, INC.

RECONSTRUCTED AND HISTORICAL OTHER INCOME CREDITS (CHARGES) - NET

FOR THE PERIOD OCTOBER 1, 1955 - DECEMBER 31, 1963

(Amounts in millions)

Years ended December 31,	Historical <u>Exhibit II-1</u>	Add back - Historical bad debts (a)	Deduct - Reconstructed bad debts <u>Schedule G-1</u>	Reconstructed <u>Exhibit II-1</u>
1955***	\$ .2			\$ .2
1956	.7			.7
1957	2.2			2.2
1958	.5			.5
1959	1.5			1.5
1960	1.3			1.3
1961	1.7			1.7
1962	2.4		\$ .7	1.7
1963	1.6	\$ .9	5.4	(2.9)
	<u>\$12.1</u>	<u>\$ .9</u>	<u>\$6.1</u>	<u>\$6.9</u>

\*\*\*Three months ended December 31, 1955.

(a) Represents portion of historical bad debts, relating to flight equipment with earlier sales dates, included in this caption.  
See page 84 for summary of all historical uncollected receivables.



H. Deferred training and other costs  
applicable to new aircraft:

The assumptions

The amount and timing of expenditures for and amortization of deferred training and other costs applicable to new aircraft ("deferred training costs") are to be adjusted to give effect to the following assumptions (which also appear as parts of Assumption E3):

- a) That TWA acquired, directly from Boeing and on the earlier delivery dates set forth in the schedule of "Reconstructed and historical delivery and in-service dates - B131, B331, and CV880 jet aircraft" (Exhibit V) annexed hereto, each of the 33 Boeing aircraft which HT Co. ordered in 1956, as follows:
- (i) 15 B131 jet aircraft historically leased and subsequently purchased from HT Co.
  - (ii) 12 B331 jet aircraft historically acquired which consisted of:
    - 4 B331 jet aircraft historically leased and subsequently purchased from HT Co.
    - 1 B331 jet aircraft historically purchased from HT Co.
    - 7 B331 jet aircraft historically purchased from Boeing, after reimbursement to HT Co. for deposits previously made thereon; and
  - (iii) 6 B331 jet aircraft historically delivered to another airline.
- b) That TWA did not lease 5 B331B aircraft from Boeing in 1962 and 1963.
- c) That TWA acquired directly from Convair and at the dates shown in Exhibit V all 30 CV880 jet aircraft which HT Co. historically ordered from Convair in 1956.

The adjusted timing of reconstructed expenditures for training costs for the CV880 fleet is as set forth in Appendix C hereto, which has been prepared by Coverdale & Colpitts for use in this proceeding.

Application of the assumptions

Adjustments made to historical financial data to apply these assumptions are described in the succeeding paragraphs.

Deferrals:

We have assumed, with your concurrence, that, except as explained in the following sentence, there would have been no changes in amount or timing of expenditures for B131 deferred training costs since (a) there is no change assumed in the size of the B131 fleet and (b) a calculation of the average number of days' delay between reconstructed delivery dates of these aircraft and the dates at which the same number of aircraft were historically leased indicates an average delay for the fleet of approximately 24 days, or less than one third of one calendar quarter. Consistent with the assumed direct acquisition of the aircraft from Boeing, it is assumed that rental costs for this fleet and the portion (\$.1 million) of aircraft acquisition costs historically amortized during rental of the fleet, which were historically included with deferred training costs, would not have been incurred; these amounts have been excluded from reconstructed deferrals.

We have assumed (in conformity with advice from Coverdale & Colpitts) that, except as explained in the following sentence, expenditures for B331 deferred training costs would have been 50% greater than historical and would have been made one calendar quarter earlier since (a) the assumed fleet size is 50% greater than historical and (b) a calculation of the average number of days' delay between reconstructed delivery dates of the original twelve aircraft and the dates at which the same aircraft were historically leased or purchased indicates an average delay for these aircraft of approximately 127 days. Consistent with assumed direct acquisition from Boeing of 4 B331 aircraft historically leased, it is assumed that rental costs for these aircraft historically included with deferred training costs, would not have been incurred. In the reconstructed financial statements, reconstructed expenditures for B331 deferred training costs have been substituted for historical amounts.

Consistent with the assumption that B331B aircraft would not have been leased, it is assumed that no B331B deferred training costs would have been incurred. Accordingly, historical B331B deferred training costs have been excluded from reconstructed deferrals.

We have assumed (in conformity with advice from Coverdale & Colpitts) that reconstructed expenditures for CV880 deferred training costs would have been 50% greater than historical, the percentage increase in fleet size (there were no historical deferred training costs relating to 6 CV880 aircraft acquired in 1963). Timing of reconstructed expenditures has been estimated by Coverdale & Colpitts. In the reconstructed financial statements, reconstructed expenditures for CV880 deferred training costs have been substituted for historical amounts.

Expenditures for reconstructed and historical deferred training costs are shown on Schedule H. The increase in total deferrals is summarized as follows:

	<u>B131</u>	<u>B331</u>	<u>B331B</u>	<u>CV880</u>	Other jet fleets and <u>L1649A*</u>	<u>Total</u>
Historical	\$7.7	\$7.2	\$3.4	\$ 9.0	\$10.1	\$37.4
<u>Deduct:</u>						
Rental costs historically deferred	.7	.4				1.1
Portion of aircraft acquisition costs historically amortized during rental of fleet	.1					.1
Exclusion of fleet			3.4			3.4
	6.9	6.8	-	9.0	10.1	32.8
<u>Add - Increase of 50% due to increase in fleet size</u>		3.4		4.5		7.9
	<u>\$6.9</u>	<u>\$10.2</u>	-	<u>\$13.5</u>	<u>\$10.1</u>	<u>\$40.7</u>

\*Reconstructed and historical amounts are assumed to be identical.

Amortization:

Historical procedures used to calculate reconstructed amortization consisted of writing off deferred training costs on a straight-line basis over a five-year period. For each fleet, this period began with the month following the date midway between the in-service date of the first aircraft and the anticipated in-service date of the last aircraft. Expenditures deferred after amortization had begun were amortized over the remainder of the five-year period, commencing in the month following the expenditure. No costs were deferred after the in-service date of the last aircraft.

For calculation of reconstructed amortization, it was assumed that expenditures for deferred training costs took place in the middle of each reconstructed calendar quarter.

Amortization of reconstructed and historical deferred training costs is shown on Schedule H. The increase in the total amortization is summarized as follows:

	<u>B131</u>	<u>B331</u>	<u>B331B</u>	<u>CV880</u>	Other jet fleets and <u>L1649A*</u>	<u>Total</u>
Historical	\$7.1	\$5.5	\$ .6	\$5.0	\$6.6	\$24.8
<u>Deduct:</u>						
Rental costs historically deferred	.6	.3				.9
Portion of aircraft acquisition costs historically amortized during rental of fleet	.1					.1
Exclusion of fleet			.6			.6
	6.4	5.2	-	5.0	6.6	23.2
<u>Add:</u>						
Additional amortization resulting from earlier in-service dates (decrease in amount included in 1963 special item)		.1		1.0		1.1
Increase of 50% in fleet size		2.7		3.2		5.9
Reconstructed	<u>\$6.4</u>	<u>\$8.0</u>	<u>-</u>	<u>\$9.2</u>	<u>\$6.6</u>	<u>\$30.2</u>

\*Reconstructed and historical amounts are assumed to be identical.

Historically in 1963 the five-year amortization period for deferred training costs was reduced to three years and the definition of deferred training costs was narrowed "to exclude items with limited future benefit" (TWA 1963 annual report, page 5). Consistent with historical change in accounting policy, we have assumed, with your concurrence, that such reduction of amortization period and narrowing of definition also occur in 1963 on a reconstructed basis. The resulting reconstructed write-off is included in the 1963 special item. Also, a write-off of \$.1 million, of L1649A deferred training costs, historically included in the 1961 special charge is included on a reconstructed basis.

The decrease in the amount included in the special items is summarized as follows:

	B131	B331	B331B	CV880	Other jet fleets and L1649A*	Total
Historical	\$ .6	\$ 1.7	\$ 2.5	\$ 3.9	\$ 2.8	\$ 11.5
Deduct:						
Rental costs historically deferred	.1	.1				.2
Exclusion of fleet			2.5			2.5
Increase in amount of amortization, resulting from earlier in-service dates		.1		1.0		1.1
	.5	1.5	-	2.9	2.8	7.7
Add - Increase of 50% in fleet size		.7		1.4		2.1
Reconstructed	\$ .5	\$ 2.2	-	\$ 4.3	\$ 2.8	\$ 9.8

\*Reconstructed and historical amounts are assumed to be identical.

Summary:

A summary of reconstructed (R) and historical (H) training costs for the period October 1, 1955 to December 31, 1963 is as follows (annual amounts are shown on Schedule H):

Fleet	D e d u c t						Balance	
	Deferrals		Amortization		Amount included in special items		December 31, 1963	
	R	H	R	H	R	H	R	H
B131	\$ 6.9	\$ 7.7	\$ 6.4	\$ 7.1	\$ .5	\$ .6		
B331	10.2	7.2	8.0	5.5	2.2	1.7		
B331B		3.4		.6		2.5		
CV880	13.5	9.0	9.2	5.0	4.3	3.9		\$ .3
Other jet fleets*	5.8	5.8	2.4	2.4	2.7	2.7	\$ .7	.7
L1649A*	4.3	4.3	4.2	4.2	.1	.1		
Total	\$40.7	\$37.4	\$30.2	\$24.8	\$9.8	\$11.5	\$ .7	\$1.1

\*Reconstructed and historical amounts are assumed to be identical.



J. Reserve for overhaul of  
jet aircraft:The assumptions

Net additions to the reserve for overhaul of jet aircraft are to be reconstructed as follows:

- a. The portions of the historical net additions resulting from provisions charged to training and other costs applicable to new aircraft are to be adjusted in the same manner as expenditures for deferred training costs, as set forth in Assumption H above.
- b. The portions of the historical net additions resulting from net provisions charged to maintenance expense are to be adjusted in accordance with the proportionate increases in historical maintenance expense estimated by Coverdale & Colpitts (Appendix B hereto).

Application of the assumptionsGeneral:

Adjustments made to historical financial data to apply the assumptions are described in the succeeding paragraphs. These adjustments result in an increase of \$6.1 million (from historical of \$11.6 million to reconstructed of \$17.7 million) in the net provisions for overhaul of jet aircraft. Consistent with a historical change of accounting policy, as of December 31, 1963 the balance in the reconstructed reserve is, with your concurrence, written off as at that date and included in the 1963 special credit. The increases in the net provisions from 1959 through 1963 are summarized as follows:

	<u>B131</u>	<u>B331</u>	<u>B331B</u>	<u>CV880</u>		<u>Other jet fleets*</u>	<u>Total</u>
				<u>(new)</u>	<u>(used)</u>		
Historical	\$1.9	\$2.2	\$1.0	\$3.6	\$ .2	\$2.7	\$11.6
Add - Increases due to earlier in- service dates and additional aircraft	.2	1.7		5.4			7.3
Deduct - Fleets eliminated			(1.0)		(.2)		(1.2)
Reconstructed	<u>\$2.1</u>	<u>\$3.9</u>	<u>-</u>	<u>\$9.0</u>	<u>-</u>	<u>\$2.7</u>	<u>\$17.7</u>

\*Reconstructed and historical amounts are assumed to be identical.

Details of increases by fleet are shown on Schedule J.

Historical accounting policies:

In 1959, TWA began making monthly provisions for periodic overhauls of jet airframes and engines. To the extent that the aircraft were utilized for training flights, provisions were included in deferred training costs. To the extent that aircraft were flown in revenue service, provisions were included in maintenance expense. Actual costs of overhauls were charged to maintenance expense as incurred; concurrently, amounts equal to the actual costs of overhauls were transferred from maintenance expense and charged to the overhaul reserve (as if actual costs had been charged directly to the reserve).

Reconstructed:

Consistent with adjustments made to historical expenditures for training costs, reconstructed net additions to the reserve for overhaul charged to deferred training costs applicable to B331 and CV880 jet aircraft were (in conformity with advice from Coverdale & Colpitts) increased by 50% and recorded one calendar quarter and three calendar quarters earlier, respectively. The reconstructed (R) and historical (H) amounts are summarized as follows:

<u>Year</u>	<u>Quarter</u>	<u>B331</u>		<u>CV880</u>	
		<u>R</u>	<u>H</u>	<u>(new)</u>	<u>H</u>
1959	3	\$ .2		\$ .1	
	4	<u>.1</u>	<u>\$ .1</u>	<u>.1</u>	
	Year total	<u>.3</u>	<u>.1</u>	<u>.2</u>	
1960	1	.1	.1	.1	
	2		.1		
	3			.3	\$ .1
	4			<u>.1</u>	<u>.1</u>
	Year total	<u>.1</u>	<u>.2</u>	<u>.5</u>	<u>.2</u>
1961	1				.2
	2				<u>.1</u>
	3				<u>.3</u>
	Year total				<u>.3</u>
		<u>\$ .4</u>	<u>\$ .3</u>	<u>\$ .7</u>	<u>\$ .5</u>

No changes were made to amounts relating to other jet fleet

Historical net additions to the reserve for overhaul charged to maintenance expense and applicable to B131, B331 and CV880 aircraft have been increased in accordance with the proportionate increase in each year's historical maintenance expense as estimated by Coverdale & Colpitts. Amounts applicable to B331B and used CV880 aircraft were excluded. Calculations of the increases were made by division, to conform with methods used by Coverdale & Colpitts. In certain early reconstructed years, B331 and CV880 aircraft are assumed to be in revenue service, but historically none were in service; consequently, there were no related historical provisions for overhaul charged to maintenance expense. In these cases, reconstructed net additions to the reserve for overhaul for such years were assumed to be amounts arrived at by the following formula:

$$\begin{array}{l} \text{Reconstructed net} \\ \text{addition to reserve} \\ \text{for overhaul for} \\ \text{next succeeding year} \end{array} \times \frac{\begin{array}{l} \text{Reconstructed maintenance} \\ \text{expense current year} \\ \text{Reconstructed maintenance} \\ \text{expense next succeeding} \\ \text{year} \end{array}}{\begin{array}{l} \text{Reconstructed maintenance} \\ \text{expense current year} \end{array}} = \begin{array}{l} \text{Reconstructed net} \\ \text{addition to reserve} \\ \text{for overhaul for} \\ \text{current year} \end{array}$$

As an illustration, calculation of reconstructed net additions charged to maintenance expense is shown for the B331 fleet on Schedule J-1.

In calculating reconstructed net additions for the B131, B331 and CV880 fleets, it was assumed that historical amounts in the reserve not attributable to charges or credits to maintenance expense or training and other costs applicable to new aircraft would not have changed. These amounts were not significant.

TRANS WORLD AIRLINES, INC.RESERVE FOR OVERHAUL OF JET AIRCRAFT  
CALCULATION OF RECONSTRUCTED NET ADDITIONS  
CHARGED TO MAINTENANCE EXPENSEFOR THE PERIOD JANUARY 1, 1959 - DECEMBER 31, 1963  
B331 AIRCRAFT

(Amounts in millions)

	Years ended December 31.	Maintenance expense (a)		Percentage of R to H	Net increase in reserve charge to maintenance expense	
		R(b)	H		R(c)	H
Domestic division:	1959	\$ .4			\$ .1(d)	
	1960	3.2	\$1.8	175.7	.7	\$ .4
	1961	5.9	3.9	151.2	.2	.1
	1962	3.1	2.1	148.2	(.3)	(.2)
	1963	.9	.6	147.0	.2	.2
International division:	1959	1.3	.3	487.6	.5	.1
	1960	9.2	5.4	170.5	1.1	.6
	1961	11.4	7.6	150.1	.5	.4
	1962	12.3	8.2	150.0	.5	.3
	1963	9.9	6.4	154.6	*	*
System <u>Schedule J</u> :	1959				.6	.1
	1960				1.8	1.0
	1961				.7	.5
	1962				.2	.1
	1963				.2	.2

\* Amount is less than \$.05 million.

- (a) Includes direct maintenance expense and applied maintenance burden.
- (b) Derived from data shown on Exhibits F and G in report of Coverdale & Colpitts.
- (c) Calculated by multiplying historical net addition to reserve by percentage in preceding column, except for domestic division 1959.
- (d) Amount is the same percentage of the reconstructed amount in the succeeding year as 1959 reconstructed maintenance expense is of 1960 reconstructed maintenance expense (apparent difference is due to rounding).

Legend:R = Reconstructed  
H = Historical

## K. Provisions for income taxes

### The assumption

Calculations of provisions for current and deferred federal income taxes are to be made on a basis consistent with the procedures historically followed by TWA in making tax computations during the respective periods.

### Application of the assumption

Reconstructed provisions for current and deferred federal income taxes were calculated by applying TWA's historical procedures to reconstructed financial data and were substituted in the reconstructed financial statements for corresponding historical provisions.

### Provisions for (refunds of) current taxes:

Historically, TWA based its annual provisions for (refunds of) current federal income taxes, at rates then applicable, upon income before taxes with adjustments for certain items which were treated differently for financial accounting ("book") and tax purposes and for net operating loss carry-backs and carry-forwards. Reconstructed provisions for (refunds of) current taxes are calculated after giving effect to similar adjustments. The various adjustments for tax purposes are summarized on Schedule K and are explained as follows:

Net excess of tax depreciation over book depreciation, jet fleet - This adjustment results from TWA's policy of providing accelerated depreciation on jet airframes and jet engines on the double-declining balance method (150% of declining balance with respect to used equipment) for tax purposes but on the straight-line method for book purposes. Reconstructed accelerated depreciation of such jet equipment was calculated based upon reconstructed costs and in-service dates and is summarized on Schedule K-3.

In 1960, TWA historically made an adjustment of \$.7 million dollars to its calculation of 1959 taxable income for tax provision purposes; such adjustment resulted from additional tax depreciation of jet equipment for 1959. A similar adjustment of \$.7 million is made in 1960 on a reconstructed basis and is included in the \$1.0 million prior year adjustment shown on Schedule K.



Net excess of tax depreciation over book depreciation, other -

The differences between book and tax deductions in this category result from (a) TWA's historically providing depreciation on certain piston airframes, piston engines and ground equipment on the accelerated double-declining balance method for tax purposes but on the straight-line method for book purposes and (b) amortization over 60 months for tax purposes of emergency facilities under certificates of necessity relating to certain piston flight equipment, compared with straight-line depreciation over a longer period for book purposes.

Differences between reconstructed and historical amounts shown on Schedule K for this item represent adjustments relating to 103 piston aircraft assumed to have been sold at earlier dates. The adjustments made consist of (a) exclusion of historical differences between book and tax depreciation provisions subsequent to the reconstructed sales dates (see subsection G for explanation of exclusion of related book depreciation), and (b) an equal and offsetting reduction in the excess of accumulated tax over book depreciation at the date of sale, i.e., the difference in gain on sale for tax and book purposes.

Training and other costs applicable to new aircraft -

Historically, TWA deducted currently for tax purposes expenditures in this category which, for book purposes, were deferred and subsequently amortized. Historical amounts shown on Schedule K for this caption are equal to the annual net change in the corresponding balance sheet caption except in 1959 and 1960; the difference of \$.4 million in each of those years represents acquisition costs on leased B131 jet aircraft, deferred for both book and tax purposes.

The reconstructed amounts shown on Schedule K for this caption are equal to the annual net change in the corresponding balance sheet caption. The above historical differences of \$.4 million in 1959 and 1960 do not arise since, on a reconstructed basis, B131 jet aircraft are purchased rather than leased and acquisition costs thereof are charged directly to flight equipment.

Other deferred debits - These amounts represent the net amount of certain book deferrals deducted currently for tax purposes. No adjustments to historical book and tax differences are required since no adjustments are made to historical book amounts.

Reserve for overhaul of jet aircraft - Historical net increases in this reserve were not deducted for tax purposes, nor was the write-off of the balance in 1963 treated as taxable income. The reconstructed and historical amounts shown on Schedule K for this caption are equal to the annual net change in the corresponding balance sheet caption, except in 1959 and 1960. Historically, in 1959 the net increase in the reserve for overhaul of jet aircraft exceeded the corresponding tax adjustment by \$1.0 million, while in 1960 the tax adjustment exceeded the net increase in the reserve by \$1.0 million. These two differences are retained in the reconstructed figures.

Instalment sales - The amounts shown represent net historical tax adjustments resulting from reporting certain sales of aircraft on the instalment basis for tax purposes and on the accrual basis for book purposes. No adjustments are made to historical amounts to reflect earlier sales of certain piston aircraft since the amounts are not significant and there would have been no net effect during the period.

Miscellaneous - The amounts shown represent the net effect of a number of income and expense items treated differently for book and tax purposes. The difference of \$.6 million between reconstructed and historical amounts for the 8-1/4 year period represents assumed increases in provisions for obsolescence of expendable parts (see Schedule F-2); book provisions for obsolescence were not historically deducted for tax purposes by TWA.

Losses carried back to periods ending before October 1, 1955 - Historically, the net operating loss of \$.9 million in the fourth quarter of 1955, together with an adjustment to 1955 income made in 1956, reduced taxable income for that year to \$5.2 million. The 1956 historical net operating loss of \$15.0 million was carried back in full to 1954. The amount of loss carried back from 1957 was limited to 1955 taxable income of \$5.2 million since the period over which net operating losses could then be carried back was two years.

The \$1.0 million effect of reconstructed equity financing prior to October 1, 1955 and the increase of \$.2 million in reconstructed net operating loss in the fourth quarter of 1955 together reduced taxable income for the year 1955 from a historical amount of \$5.2 million to a reconstructed amount of \$4.0 million. The 1956 reconstructed net operating loss of \$15.8 million is carried back in full to 1954. The difference of \$.8 million between the reconstructed and historical 1956 carry-backs to 1954 is the net difference between aggregate reconstructed and historical amounts shown on Schedule K as losses carried back to periods ending before October 1, 1955. The amount of reconstructed loss carried back from 1957 is limited to reconstructed 1955 taxable income of \$4.0 million.

Losses carried back and forward to periods ending after September 30, 1955 - The amounts shown on Schedule K for these two captions represent carry-backs and carry-forwards within the statutory period of three years and seven years, respectively.

Revisions to taxable income subsequently made - The adjustments made historically are made in the same amounts on a reconstructed basis. The \$1.0 million adjustment in 1960 includes \$.7 million relating to 1959 jet fleet tax depreciation, as explained above.

Summary - Amounts shown on Schedule K for reconstructed provisions for (refunds of) current income taxes result from applying appropriate federal income tax rates to reconstructed taxable income. The net reconstructed and historical refunds of \$10.3 million and \$9.9, respectively, for the 8-1/4 year period relate to net operating losses carried back to periods ending before October 1, 1955. No adjustments are made to provisions for state taxes since the amounts are not significant.

Provisions for deferred federal income taxes:

Provisions for deferred federal income taxes are summarized on Schedule K-1 and an analysis of balances of amounts on which deferred federal income taxes are provided is presented on Schedule K-2. Consistent with historical policy, reconstructed deferred taxes are provided, generally at 50%, with respect to the items shown on Schedule K-1 only to the extent that a current tax benefit could be received.



In 1960 TWA historically provided deferred taxes at 25%, or \$.1 million, with respect to a deferred instalment gain of \$.4 million, representing a portion of the excess of book over tax basis of a piston aircraft sold in 1960; the unamortized balances of the deferred tax and deferred instalment gain of \$.1 million and \$.3 million, respectively, were written off in 1961 when the aircraft was repossessed. The same adjustments are made on a reconstructed basis.

The amounts shown on Schedule K-1 as the increase or decrease in net operating loss carry-forwards representing tax deductions over book deductions are equal to the net operating losses arising in each year, as shown on Schedule K, except in 1961 and 1962. In those two years, the historical net operating losses arising therein exceeded gross tax over book deductions in each year. Because of increases in reconstructed book income, reconstructed net operating losses are made up solely of tax over book deductions.

The amounts underlying deferred federal income tax balances, shown on Schedule K-2, represent the cumulative amounts shown for the corresponding captions on Schedule K except as explained in the footnote.

#### Summary:

A condensed summary of tax provisions for the 8-1/4 year period is as follows:

	Reconstructed	Historical	Increase (decrease) over historical
Income (loss) and special credit (charge) before income taxes	\$45.8	(\$25.9)	\$71.7
Net (refunds) of current taxes	(\$10.3)	(\$ 9.9)	(\$ .4)
Provisions for state taxes	.6	.6	-
Adjustments of provisions made in prior years	(1.4)	(1.4)	-
Net provisions for deferred income taxes	36.5	-	36.5
Total provisions for (refunds) of income taxes	\$25.4	(\$10.7)	\$36.1
Net operating loss carry-over at December 31, 1963	\$ 5.6	\$49.3	(\$43.7)
Unused investment credit carry-over at December 31, 1963*	\$ 8.1	\$ 8.4	(\$ .3)

\*Reconstructed and historical investment credits arising in 1962 and 1963 were not usable through December 31, 1963 since there were no federal income taxes payable.

TWA Ex. 7(b)(2), Appendix A  
(Price Waterhouse Study - Volume Two)

APPENDIX A

REPORT OF DREXEL HARRIMAN RIPLEY, INCORPORATED  
(Incorporated herein by reference)



APPENDIX B

REPORT OF COVERDALE & COLPITTS  
(Incorporated herein by reference)

TWA Ex. 7(b)(2), Appendix C  
(Price Waterhouse Study - Volume Two)

APPENDIX C

SUPPORTING INFORMATION PREPARED BY  
COVERDALE & COLPITTS

# COVERDALE & COLPITTS

CONSULTING ENGINEERS

120 WALL STREET

NEW YORK, N.Y. 10005

WILLIAM H. COVERDALE (1904-1948)  
WALTER W. COLPITTS (1913-1981)

WHITEHALL 3-7400

CABLE ADDRESS: COVERCOL

JOHN E. SLATER  
GEORGE V. T. BURGESS  
WILLIAM A. GORDON  
SAMUEL R. BROWN  
RUSSELL F. PASSANO  
EDWARD L. WEAVER  
JOHN C. GARDNER, JR.  
CHARLES W. GILLESPIE  
DONALD A. LOCHHEAD  
NORMAN E. CARLSON

GEORGE W. BURGES  
AUGUSTUS P. FARNSWORTH  
CONSULTANTS

May 2, 1966

Price Waterhouse & Co.  
60 Broad Street  
New York, New York

Attention: Mr. Donald H. Trautlein

Dear Sirs:

Pursuant to your request we hand you herewith statements showing:

1. Historical and Estimated In-Service Dates for TWA, B-131, B-331, and CV 880 Jet Aircraft (2 pages)
2. Estimated Quarterly TWA Capital Expenditures for Training and Integration Costs for the Fleet of 30 CV 880 Aircraft, 1958 - 1960
3. Estimated Quarterly TWA Capital Expenditures for Rotable Parts for the Fleet of 30 CV 880 Aircraft, 1958 - 1963
4. Estimated Quarterly Additional TWA Capital Expenditures for Ground Property and Equipment for the Assumed Additional and Earlier Receipt of Jet Aircraft, 1959 - 1962

Respectfully submitted,

*Coverdale & Colpitts*

Consulting Engineers

cc: Mr. D. B. Tenney  
Cahill, Gordon, Reindel & Ohl

HISTORICAL AND ESTIMATED IN-SERVICE DATES FOR TWA  
B-131, B-331, and CV 880 JET AIRCRAFT

B-131 JET AIRCRAFT

Historical In-Service Dates, from TWA Schedules 3-66M  
15 Aircraft

July 9, 1959	May 1, 1959	July 7, 1959
March 20, 1959	May 27, 1959	July 12, 1959
April 2, 1959	May 29, 1959	July 12, 1959
April 4, 1959	May 29, 1959	July 29, 1959
April 24, 1959	June 1, 1959	August 4, 1959

Estimated Dates In-Service for Earlier Delivery  
15 Aircraft

April 15, 1959	April 9, 1959	June 3, 1959
January 6, 1959	April 24, 1959	June 19, 1959
February 6, 1959	May 16, 1959	July 5, 1959
March 6, 1959	May 19, 1959	July 16, 1959
April 5, 1959	May 30, 1959	August 2, 1959

B-331 JET AIRCRAFT

Historical In-Service Dates, from TWA Schedules 3-66M  
12 Aircraft

November 23, 1959	February 25, 1960	May 19, 1960
December 3, 1959	April 24, 1960	May 28, 1960
December 9, 1959	April 28, 1960	July 4, 1960
January 9, 1960	May 11, 1960	July 6, 1960

Estimated Dates In-Service for Earlier Delivery  
18 Aircraft

August 19, 1959	November 19, 1959	April 5, 1960
September 4, 1959	November 23, 1959	May 9, 1960
September 9, 1959	December 28, 1959	May 12, 1960
October 5, 1959	January 12, 1960	May 22, 1960
October 19, 1959	January 31, 1960	June 20, 1960
November 10, 1959	March 13, 1960	July 14, 1960

CV 880 JET AIRCRAFTHistorical In-Service Dates, from TWA Schedules 3-66M  
20 CV 880 Aircraft

January 14, 1961	February 10, 1961	June 1, 1961
January 12, 1961	March 16, 1961	June 15, 1961
January 12, 1961	March 30, 1961	July 19, 1961
January 12, 1961	April 14, 1961	August 18, 1961
January 12, 1961	April 1, 1961	September 8, 1961
January 22, 1961	April 30, 1961	October 20, 1961
January 25, 1961	May 20, 1961	

Historical In-Service Dates, from TWA Schedules 3-66M  
6 CV 880 Aircraft

August 18, 1963	September 8, 1963	September 30, 1963
August 24, 1963	September 24, 1963	October 4, 1963

Estimated Dates In-Service for a Fleet of 30 Aircraft  
30 Aircraft

July 13, 1960	May 25, 1960	July 25, 1960
May 15, 1960	May 25, 1960	July 25, 1960
May 15, 1960	May 25, 1960	August 25, 1960
May 15, 1960	June 25, 1960	August 25, 1960
May 15, 1960	June 25, 1960	August 25, 1960
May 15, 1960	June 25, 1960	August 25, 1960
May 15, 1960	June 25, 1960	August 25, 1960
May 15, 1960	July 25, 1960	September 25, 1960
May 15, 1960	July 25, 1960	September 25, 1960
May 15, 1960	July 25, 1960	September 25, 1960



ESTIMATED QUARTERLY TWA CAPITAL EXPENDITURES  
FOR TRAINING AND INTEGRATION COSTS FOR  
THE FLEET OF 30 CV 880 AIRCRAFT

1958 - 1960

<u>Year</u> <u>Quarter</u>	1958	1959	1960	Grand Total
	( M i l l i o n s )			
1st Quarter	\$ -	\$ -	\$ 4.0	
2nd Quarter	-	-	4.0	
3rd Quarter	0.1	0.8	3.0	
4th Quarter	-	1.6	-	
Total	\$0.1	\$2.4	\$11.0	\$13.5

The figures above provide a 50 percent increase in historical capital expenditures for training and integration expenditures for a fleet of 20 CV 880 aircraft, which we believe is a reasonable increase to use to calculate reconstructed capital expenditures for the 50 percent larger fleet of 30 CV 880 aircraft. The allocation of such expenditures to various quarters has been done with reference to the quarters in which the historical expenditures were recorded, the historical CV 880 aircraft receipt dates and the estimated dates the aircraft of the larger fleet of 30 would have been available for revenue service.

ESTIMATED QUARTERLY TWA CAPITAL EXPENDITURES  
FOR ROTABLE PARTS FOR THE FLEET OF 30 CV 880 AIRCRAFT

1958 - 1963

Year Quarter	1958	1959	1960	1961	1962	1963	Grand Total
(M i l l i o n s)							
1st Quarter	\$ -	\$ -	\$1.3	\$0.9	\$0.1	\$ -	
2nd Quarter	-	-	2.6	0.9	0.5	-	
3rd Quarter	-	1.0	2.2	0.2	-	0.1	
4th Quarter	-	1.6	1.1	0.5	-	-	
Total	\$ -	\$2.6	\$7.2	\$2.5	\$0.6	\$0.1	\$13.0

The amounts listed above provide a 50 percent increase over historical expenditures in 1959-1963 for rotatable parts for TWA's fleet of 20 CV 880 aircraft, which we believe is a reasonable increase to use to calculate reconstructed capital expenditures for a 50 percent larger fleet of 30 CV 880 aircraft. The allocation of such expenditures to various quarters has been done by us with reference to the quarters in which the historical expenditures were recorded, the CV 880 aircraft's historical receipt dates and the dates assumed for the fleet of 30 CV 880 aircraft.

ESTIMATED QUARTERLY ADDITIONAL TWA CAPITAL EXPENDITURES  
FOR GROUND PROPERTY AND EQUIPMENT FOR THE ASSUMED  
ADDITIONAL AND EARLIER RECEIPT OF JET AIRCRAFT

1959 - 1962

Year and Quarter	Ramp Equipment	Maintenance and Engineering Equipment	Miscellaneous Ground Equipment		Other (A)	Estimated Additions
			Simulator	Other		
	( M i l l i o n s )					
<u>1959</u>						
1	\$ -	\$ -	\$ -	\$ -	\$0.1	\$ 0.1
2	-	-	-	0.1	0.1	0.2
3	0.2	0.2	-	0.1	0.1	0.6
4	0.1	0.4	1.1	-	0.1	1.7
Total	\$ 0.3	\$ 0.6	\$ 1.1	\$0.2	\$0.4	\$ 2.6
<u>1960</u>						
1	\$ 0.3	\$ 0.6	\$ -	\$ -	\$0.1	\$ 1.0
2	0.2	-	(1.1)	-	-	(0.9)
3	0.3	0.2	-	-	-	0.5
4	0.6	0.1	-	-	-	0.7
Total	\$ 1.4	\$ 0.9	\$(1.1)	\$ -	\$0.1	\$ 1.3
<u>1961</u>						
1	\$(0.2)	\$(0.2)	\$ -	\$ -	\$ -	\$(0.4)
2	(0.2)	(0.1)	-	-	-	(0.3)
3	(0.1)	(0.2)	-	-	-	(0.3)
4	(0.1)	(0.2)	-	-	-	(0.3)
Total	\$(0.6)	\$(0.7)	\$ -	\$ -	\$ -	\$(1.3)
<u>1962</u>						
1	\$(0.6)	\$(0.1)	\$ -	\$ -	\$ -	\$(0.7)
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
Total	\$(0.6)	\$(0.1)	\$ -	\$ -	\$ -	\$(0.7)

(A) For other buildings, maintenance buildings, and furniture and fixtures.

We estimated the above increases in TWA's capital expenditures for ground property and equipment items on account of the assumed additional and earlier receipt of jet aircraft, with reference to historical expenditures for such items in 1955-1963 and TWA's historical and assumed jet aircraft fleets and receipt dates thereof through 1962. No increases estimated for 1963.

APPENDIX D

REPORT OF R. DIXON SPEAS ASSOCIATES  
(Incorporated herein by reference)

TWA Ex. 7(b)(2), Appendix E  
(Price Waterhouse Study - Volume Two)

APPENDIX E

SUPPORTING INFORMATION PREPARED BY  
R. DIXON SPEAS ASSOCIATES



R. DIXON SPEAS ASSOCIATES

*Aviation Consultants*

MANHASSET, LONG ISLAND, NEW YORK - 516 MA 7-7460  
CABLE-SPEASAV MANHASSET NY

May 2, 1966

Price Waterhouse & Co.  
60 Broad Street  
New York, New York

Dear Sirs:

Attached to this letter as Annex A is a schedule of quarterly values of aircraft retirement contracts relating to 103 specific piston engine aircraft sold by TWA in the period from December 31, 1958 to July 20, 1962. The data in this schedule is derived from our report to Cahill, Gordon, Reindel & Ohl dated May 2, 1966 and entitled "Determination of TWA Financial Loss Attributable to Late Disposal of Piston Engine Aircraft."

The schedule shows by quarter the RDSA assigned value of the contracts to be reconstructed grouped according to actual retirement date, and the best estimate of the reconstructed contracts grouped by reconstructed retirement date. These reconstructed contract values by quarter are the sums of the original contract amounts redistributed to the quarters of reconstructed retirement plus the best estimate of the respective increased realizations which would have been occasioned by the earlier retirement of these 103 aircraft as determined by a detailed statistical analysis described in the subject report.

Very truly yours,

R. DIXON SPEAS ASSOCIATES

  
R. Dixon Speas

### QUARTERLY VALUES OF AIRCRAFT RETIREMENT CONTRACTS

ACTUAL AND RECONSTRUCTED FOR THE 103 TWA AIRCRAFT  
FOR WHICH RECONSTRUCTED RETIREMENT DATES WERE PROVIDED

Quarter Ended	Actual Contracts to be Reconstructed RDSA Values	Reconstructed Contracts		
		Original Contract Amount	Increased Realization	Total
12/31/58	\$ 581,000	\$ 1,104,000	\$ 37,000	\$ 1,141,000
3/31/59	783,000	261,000	4,000	265,000
6/30/59	120,000	1,671,000	82,000	1,753,000
9/30/59	2,150,000	3,406,000	393,000	3,799,000
12/31/59	1,048,000	3,893,000	557,000	4,450,000
3/31/60	875,000	318,000	347,000	665,000
6/30/60	422,000	7,088,000	2,247,000	9,335,000
9/30/60	1,684,000	822,000	3,214,000	4,036,000
12/31/60	1,672,000	-	-	-
3/31/61	89,000	-	-	-
6/30/61	451,000	-	-	-
9/30/61	4,076,000	-	-	-
12/31/61	2,790,000	-	-	-
3/31/62	407,000	-	-	-
6/30/62	279,000	-	-	-
9/30/62	136,000	-	-	-
Totals	\$18,563,000	\$18,563,000	\$ 6,881,000	\$25,444,000

#### Notes

- 1) The RDSA Assigned Values for the Actual Contracts reflect the amounts for airframes, engines, propellers and radios as drawn from TWA Form 41, Schedule B-8 submissions to the CAB. Where not specified by aircraft, the amounts for propellers and radios were prorated as explained in the RDSA study.
- 2) The Original Contract Amount column represents the redistribution of the Actual Contract Values to the Reconstructed Sales Dates.